TELEVISION VIEWING

ITS EFFECT ON CHILDREN'S PERSONAL AND EDUCATIONAL DEVELOPMENT

K. ANURADHA

Television viewing Behaviour of Children is not subjected to extensive research though it is felt that it is a very important area. Despite the fact that television has been in wide spread of use only for a short time, we do have a new generation of children growing up who have been exposed to television throughout the major part of their lives. The attraction of television for school aged children has led to an increasing amount of research on the relationship between television viewing and educational development.

In this book a sincere attempt has been made by the author to evalute the inter-relationships among television viewing behaviour, personal and educational development in children. Children spent most of their out of school time watching television. It was found that there are several different patterns in their use of television. There are considerable differences among the children in their use of television and these differences were not only the result of child's sex and social background but also varied in accordance with their locus of control and educational achievement status.

Some of the salient findings regarding educational development and television viewing by children are

a) Heavy television watching relates inversely to educational achievement status.

b) As the educational achievement status increases, parents get more involved in taking decisions about the programmes watched by children.

c) Heavy television viewing will have a definite negative effect on the educational achievement of childern.

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Foreword

A systematic and scientific study of the influence of electronic media on children, especially on their personal and educational development is needed now more than ever before. The reason is obvious. Many myths and fads have been thriving in our society regarding the impact of T.V and other electronic media on children. They need to be examined with empirical data and the truth established. It is in this context, the book authored by Mrs. K. Anuradha and published by Discovery Publishing House, New Delhi, provides all those concerned with child welfare an opportunity to understand, what is really happening.

The author has interviewed 180 children in the age group of 5+ to 10+ years and their parents to collect data on various aspects of Television Viewing Behaviour of children and their attitude towards viewing television programmes. A comprehensive and thorough analysis of the information with special reference to the children's achievement and progress in the school has revealed results, with far reaching implications. It is established that heavy television viewing definitely influences the children adversely not only their educational development but also their social and personality development. Parents and children seem to have divergent views with regard the nature of these effects. The author has discussed cogently all the issues concerning the impact of the electronic media citing extensively the research data reported in the literature. The book, therefore, is perhaps a maiden effort, to draw the attention of parents, programme planners and educators, to the television viewing behaviour of children and its consequences. It is to be noted that television viewing is not all that bad and has also positive contributions to the congnitive growth and development of children provided it is porperly monitored by parents.

I recommend this book to be taken seriously by all those involved in child development and welfare, particularly in the present context of heavy expansion of television network both at the Governmental and Private sectors.

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Preface

This book is based on my M.Phil thesis on children's Television viewing behaviour and its effect on personal and educational development. This is an important aspect in the present Indian context. With increase in Science and Technology several changes appeared and this change has affected people in several ways. The central fact about modern technology is that it powers for both good and evil. The part of adverse effect of science and technology has been great concern to many social thinkers today. When television began, there were great hopes and great fears concerning its possible effects. Since much of time is spent by children watching television, surely television viewing has some effect on children. Research on children's television viewing has been scant in India. We need more information regarding children's television viewing and its effect on personal and educational development of children particularly in Indian context.

The present research explored the quantum of television watching by children, type of programmes watched and effect of television on personal development of children such as figures bearing upon home work, reading habits and bed time hours and an exploration of potential physical, emotional and educational development which might result from viewing television. Attempt has also been made to study the parent's attitudes regarding the children's television viewing behaviour and the extent to which parents' views and childrens' views are similar or dissimilar were discussed. It proves relevant information to parents, educators and other experts who work with young children, specially in Indian context. It also helps Doordarshan people to plan and telecast programmes for children.

Author

List of Abbreviations

CATV	:	Children's Attitudes towards Television Viewing
I score	:	Total internal score on Intellectual achievement responsibility scale
IAR	:	Intellectual Achievement Responsibility
IQ	:	Intelligence Quotient
LOC	:	Locus of Control
PATV	:	Parents' Attitudes towards children's Television viewing
SES	:	Socio-economic Status
TV	:	Television
UKG	:	Upper Kinder Garten (second year of pre-school)
VCP	:	Video Casette Player
VCR	:	Video Casette Recorder.

1

Introduction

> "Living with technology is like climbing a mountain along a knife-edge, which narrows as it nears the summit—As long as we can keep our footing, we approach our goal, but the risks of a misstep constantly mount. Further more, we cannot simply back up or even cease to move forward. We are irrevocably committed to the peak."
>
> —*Harvey Brooks* (*1975*)

The role of science and technology has always been pervading in moulding the society through out the human history. Today modern science and high technology are responsible for changing the nation's economy and the life style of people in the society at a speed often too fast to comprehend. The impact of science and technology is now phenomenal.

With increase in science and technology several changes appeared and this change has affected many millions of people. Urban life succeeded rural life, the city home took the place of the farm home. As a result of new invention there has been great social mobility and instability. Multiplicity of social contacts not dreamed of before has today become common place. Invention has almost annihilated space by land, sea and sky. They carry man's ideas by telephone, wireless and radio with lightning speed and to most distant parts. Still further invention like television were impending.

No wonder, therefore, the Indian social scientists of today have to pay much greater attention to the social issues emanating from application of scientific and technological development. While modern scientific and technological aids have made our life generally easier, faster and more prosperous, there are many issues which are working in adverse directions also, making human life unhappy in many ways. The central fact about modern technology is that it powers for both good and evil increases as it evolves, and thus place an ever greater burden on human responsibility and choice. The part of the adverse effect of science and technology has been of great concern to many social thinkers of today.

Mass communication depends for its operation on the many technological inventions which have, in recent times, transformed the life of man. The technological era which, within a period of not more than 250 years, has brought man to a stage when he has not only reached the moon but contemplates approach to the more distant celestial bodies in the solar system, has placed mass communication on a highly scientific pedestal.

Television and radio are the electronic magic carpets that transport millions of persons each day to far away places. They are the twentieth century creations of the technological revolution that has been transforming much of the world for almost two centuries, and their impact on our social, political and cultural life has been profound.

It has been only a little over a decade since a television set became a part of the equipment of many of Indian homes. And television has become available to a large number of Indian families only during the last few years. In this short time, television has brought changes in the lives of children.

When television began, there were great hopes and great fears concerning its possible effects. The optimists believed that it would educate children in the widest possible sense, giving them an opportunity to learn about science and human life in such a fascinating way that learning would be a joy instead of a labor. The pessimists worried out whether too much television would damage children's eye sight, whether it would keep them away from healthy active play, whether it would corrupt them by showing too much crime and violence and whether it would interfere with their study and learning of school subjects.

Despite the fact that television has been in wide spread use for only a short time, we do have a new generation of children growing up who have been exposed to television throughout the major part of their lives. Kunhi Krishnan (1990) described television as the first mass-produced and organically composed symbolic environment into which all children are born, and in which they will live from cradle to grave. So perhaps we do have enough experience with television now to begin to assess its effects.

Television's Impact on Human Development

Although diverse effects can be exerted by television, two that have attracted wide spread attention have been the effects on cognitive development and anti-social behaviour, particularly on violent, aggressive acts of children.

Television and Cognitive Development

From the large quantity of research on learning through the medium of television, three conclusions are of particular significance.

First, when television programmes are analyzed in terms of Piaget's levels of intellectual growth, it becomes clear that there is viewing material which can be comprehended by children at every step of the mental development hierarchy. For example, Williams (1981) reported that infants as young as 6 months of age spend time attending to television programmes. And in Piaget's scheme, infancy is the sensory-motor period when children are learning to coordinate sight and sound to achieve meanings. Beyond infancy, children begin to acquire those notions of symbolism necessary for language skills so that television can aid in such development. Young children are also animistic and anthropomorphic, attributing life and human qualities to animals and objects. These modes of thought are served by television programmes and particularly by cartoons - that picture animals expressing human thoughts and feelings. During Piaget's next stage, that of concrete operations, the child who is just entering primary school is acquiring the ability to classify objects, including objects seen on television. Children at this age start to enjoy recounting events and predicting their outcome (Noble, 1975), dramatic shows furnish abundant opportunities to practice such skills. By the close of the elementary school, children have entered the formal operations stage and become capable of the sort of abstract thinking in which adults engage. Adolescents, with these newly acquired mental abilities, begin to comprehend social, political and religious ideologies and they also become increasingly preoccupied with their emotional lives. Television in nearly all nations offers a variety of programmes catering to these more mature intellectual interests and emotional concerns. In summary, both educational and commercial television furnish material on which children at all stages of intellectual growth can exercise their evolving mental abilities.

A second conclusion is that television is an effective medium for teaching concepts and generalisations, even when the audience is watching for the purpose of entertainment rather than instruction.

A third conclusion is that television appeals to both eye and ear and its dramatic quality renders it particularly effective in capturing viewer's attention and in exerting a strong perceptual impact.

Television and Violence

There is no doubt that a great quantum of violence is depicted on television throughout much of the world. The amount of violence on television varies from one nation to another. While there is no question about the amount of violence children see on television, there continues to be disagreement about its impact on them. On one side in the debate are those who contend that children not only learn techniques of destructive behaviour from television, but they also learn that such behaviour is often reward. On the other side are the defenders of televised violence who propose that such programmes afford children a chance to vent their aggressive tendencies vicariously through the actions of the performers, so it is unnecessary for young viewers to engage in violent acts in their own lives.

However, the research evidence favours the critics rather than the defenders of televised violence. A million-dollar study supported by the surgeon general's office in the United States led to the conclusion that violent programmes "do have an adverse effect on certain members of our society" (Schramm, 1973).

While behaviours depicted on television can indeed influence children's social development, it is important to recognize that television is only one of the environmental forces affecting the child. Each child may use television in a unique manner in order to gain satisfactions not afforded by other sources in the environment. For example, children who feel emotionally insecure because of difficulties with parents or peers are likely to be heavy viewers, apparently seeking from television the emotional support they lack in their own social interactions (Schramm and Roberts, 1971). Consequently the impact the television will exert in the life of a particular child needs to be assessed in relation to the impact exerted by other significant agents-family, peers, school and the broader society in which the child is reared.

To assess the television effects, will not be an easy task, however for this generation of children have obviously been exposed to many new influences other than television. If present-day children are different from those of earlier generations, different for better or worse, it is difficult to know how much of the credit or the blame to lay at the door of television, considering many other changing conditions to which children have also been exposed.

Childhood is a period of information seeking during which the child learns what to expect from the world and what the world expects from him. Childhood and adolescence are periods of rapid change. As children grow older their interests, needs, skills, experiences, capabilities and capacities all change. That which is novel to the young child may not be so to his older counterpart, the grade school child may ignore information that the teenagers actively seeks. To understand how various children might be affected by the television, it is necessary to determine their individual pattern of media use. How much do they use television ? What content do they select ? Such use patterns are best described in terms of variables like age, sex, family socio-economic status and so on.

Quantum of Children's Television-Viewing

Schramm, Lyle and Parker (1961), in their detailed study of the media usage of North American children found that between the ages of three and sixteen years, the average child devotes over one-sixth of his waking hours to television, more time than he spends in school. Television because of its early accessibility is one of the first media used.

Several studies have demonstrated that among teenager, televiewing varies inversely with IQ (Himmelweit et. al., 1958, Schramm et. al., 1961).

Although the British study demonstrated only small relationship between family socio economic status (SKS) and television viewing (Himmelweit et. al., 1958), studies conducted in

North America have consistently found that children of lower SES families use pictoral media more and print media less than do children of middle and upper SES families (Schramm et. al., 1961).

Determinants of Television-Viewing

Both the Standford and British studies (Himmetweit et. al.. 1958; Schramm et. al., 1961) found that the media behaviour of children correlates highly with that of parents. A pattern of light or heavy television viewing will usually go through a family.

The activity of television watching is more highly regarded by working-class than by middle-class respondents (Geiger and Sokel, 1959). Himmelweit and her colleagues discovered that 'The insecure child in particular the child who had difficulties in making friends with other children' and the child who felt rejected by his peer group were more likely to be heavy viewers of television (Hammelweit et. al., 1958).

"Parent problems" produce similar results. Maccoby (1954) found that middle class children who experience more family conflict, who encounter many parental restrictions and are not warmly treated, tend to spend more time with television than do other children of the same age.

Psychological Consequences of Television-Viewing

Television can no longer be considered as a casual part of daily life, as an electronic toy. The rapid extension of television to all parts of the world has stimulated a great quantity of research about the impact of television on the developing child.

Television has led to a slight delay on children's bed times, somewhere between fifteen and twenty five minutes per night (Himmelweit et. al., 1958; Schramm et. al., 1961; Furu, 1962). This is an average, some children do not change bed time at all, some retire as much as an hour later. Loss of sleep may be less than the change in bed time indicates, however, there is evidence that those who stay up late with television are those least able to afford it—children of lower intelligence or from homes where parental control is lax, or where school performance is less important (Schramm et. al., 1961).

The effect of television-viewing on educational achievement, and aspirations have also received some attention. Findings are more suggestive than definite. It does seem likely that heavy television viewing relates inversely to school achievement (Rubinstein, 1983). At the same time heavy viewers with moderately low IQs and/or from family settings in which intellectual stimulation is low may actually be learning more from television relevant to school subjects than they would without that input from television. High IQ students who are heavy viewers may show less school aspirations. However all of these relationships are complex and subject to other concurrent influences.

Since much of time is spent by children watching television, surely television-viewing has some effect on children. But the point really is how much different, how much more intensive is this effect than what is created by some of the other conventional media ? The dramatic art, for example, also leaves a lasting impression on the mind. The main difference, it appears is that, as television is a continuous process, day in and day out, in the home, it becomes a part of the total environment of the family and society. Chatterjee (1979) viewed that if the programmes show too much of sex, crime or violence, the children and adolescents cannot but be affected by them. Therefore, the planners in any country have a responsibility to ensure that the programmes of television do not have this degrading effect on the child or the adolescent's mind.

To achieve this end, the programmes of television should be considered in their entirety and not only the children's programmes, since it is wrong to assume that the children see children's programmes only. Nor is it possible to restrict children from viewing adult programmes as in the case of films. A very large amount of children's viewing time is spent on programmes intended primarily for adults. Maccoby (1951) in her study found that the first graders were devoting forty per cent of their viewing time to what most viewers would call adult programmes and by the time they were in the sixth grede, 4/5 of the programmes they saw were adult programmes. Special care is therefore necessary for drawing up programmes.

Habit Forming

Another most important reason for exercising control on programmes in television is that it is a habit-forming medium and because it attracts attention both through sight and hearing, its influence is much greater than the radio.

Schramm, Lyle and Parker (1961) reported that some children appeared to be quite compulsive about television. Such children were vaguely ill – at ease when they missed a favourite programme, or when some programme or performer they particularly liked was off the air. Some children felt uneasy when they were away from television on a summer vacation. Schramm et. al., (1961) mentioned that the message the child receives from the television show can depend upon what the child brings to the television set – that is, it depends upon the child's personal, social and psychological characteristics.

Attitudes toward Television

Schramm and his associates (1961) found that most children regarded television with both affection and respect. What is surprising was that they were not alone, their parents also showed similar attitude towards television.

Maccoby (1957) opined that television is not the only, and not even the major influence upon children's attitudes and values in most spheres of life. She mentioned that there is reason to believe that children's attitudes and beliefs can be shaped by what they see on television, and that emotions and impulses are aroused in the child viewer to match those portrayed by screen characters, it is a reasonable conjecture that the child responds in kind to the emotional states depicted on the screen whether these emotions be anger, sexual feelings, joy or self-sacrificing altruism.

Television-viewing has been found to affect the way children think about various occupations and their beliefs about how one should believe in order to succeed in life. Heavy-viewers for instance, are more likely to believe that self confidence is of great importance. In general heavy viewers are more stereotyped, in their thinking seeing people as either good or bad, week or strong, where as children with less exposure to the mass media refer more frequently to specific reasons why a person would behave in a particular way in a given situation (Maccoby, 1964).

All this means simply that television is part of the total environment that we, as a society of adults, provide for children. Although television is a fairly new element in this environment, it is already providing a share of the influences which shape children's thoughts and actions. So there is a need for researchers to be concerned about television and apply standards of evaluation to it, in the same way they do for other important aspects of the environment that affect children, such as school, or conditions that affect children's health and safety.

Many interesting questions may be raised with regard to television-viewing behaviour of children in the present context of our country which is exposed to high technology and media influence. For example, is television-viewing approved by parents ? How do parents feel about the influence of television-viewing on the children's personal and scholastic development ? Do children consider television viewing as helpful to their school related work ? What psychologieal variables determine the selection of programmes for viewing ?

We need more information regarding children's television-viewing behaviour and its effect on personal and educational development of children particularly in Indian context. This information helps in eliminating myths and fads and may help us to take a realistic view of the media impact on children.

Since a child's use of television is an adult responsibility research in this aspect also helps in parent education. It is with this intention, the present study was initiated.

2

Review of Relevant Literature and Reported Studies

> "The impact of the visual medium like television or cinema on the viewers is far greater than the impact of books or pictures. Its potential to convey crime, sex and horror is infinitely greater than that of books".
>
> —Durga Sharma
> The Hindu, June 25, 1991.

While there are very few studies on the impact of television viewing on children in India, many studies have been carried out extensively in this field in U.S.A. and U.K.

As the media use depends to a large extent on available time, the time spent on the media may, in and of itself, lead to a variety of effects-reducing the amount of time spent on other activities possibly affecting such things as school work and bed time.

One early study indicated that television cuts into the time, children spent in play and household tasks (Maccoby, 1951), research conducted in the late fifties found that the media seldom take children away from such structured activities, as organized team sports, school activities, household duties and so forth (Himmetweit et al., 1958 ; Schramm et al., 1961).

No relationship between amount of televiewing and amount of time spent on home work was found either in the United States (Maccoby, 1951) or in England (Himmelweit, et al., 1958). The evidence is not unanimous, however, Furu (1962) studied a group of Japanese students before and after television was available in their community. Post-television measurement including children both with and without television in the home compared to controls (matched on school grade, sex and intelligence), children with television in the home spent less time on home work.

Such results point to the danger of making gross generalizations about the effects of the media. Children from different cultures probably bring different experiences and expectations to the media, use them for different things, take different things from them So it is difficult to generalize about such a multitudinous literature. Nevertheless, certain propositions can be said with some confidence to receive support. They cover such disparate topics as follows :

1. The effect of television on personal and educational development of children.
2. Children's television viewing behaviour.
3. The impact of electronic media (television) on young viewers.
4. Locus of control, television viewing and academic achievement.
5. Attitudes of children and parents towards television viewing.

1. The Effect of Television on Personal and Educational Development of Children

The effect of television on the children and adolescents has been a favourite subject of comment and discussion in intellectual quarters. The argument in favour of introducing television in developing countries is that it is of great help in mass education of children and others and in informing and eduatcing people on national programmes and development efforts. As against the view, there are others those who are worried over the effect of television on children's eyes, whether it, is likely to keep them away from healthy sports and game's whether it would corrupt them by showing too much crime violence and sex and whether it would interfere with their studies.

The term 'effects' covers a broad range of consequences. Effects may be direct (as when the child takes something from the media) or indirect (as when time spent on the media precludes time spent on other activities). They may be immediate (e.g., emotional arousal or gratification of needs during or closely following explosure) or long term (e.g., facts, behaviours or attitudes learned from the media and operatlve long after exposure).

The following are some of the studies reported in this area.

Studies Conducted Outside India

Zuckerman, Singer and Singer (1976) conducted a study on the relationship between children's television viewing and their reading ability, reading habits and school behaviour. The children in the study were third, fourth and fifth graders, enrolled at two public schools in a middle-class suburb of New Haven, Connectieut. The children were above average in terms of IQ and reading scores. The mean IQ was 110 on the McGraw-Hill IQ test, as compared to the national norm of 100.

Demographic information was assessed by a questionaire distributed to the parents. Parents also reported the number of television sets in the home and whether or not they limited their children's television viewing. In addition, parents were asked to estimate the amount of time that the children spent on reading on a typical school night.

Parents were asked to keep a record of all the television programmes that the family watched during two weeks in October and two weeks in November of 1978. The data were analyzed in terms of the average number of hours each parent and child watched television each week and the amount of time spent watching particular types of programmes. The children's weekly viewing ranged from 1 to 40 hours with an average weekly viewing time of 15 hours.

Step-wise multiple regression analysis were used to determine the extent to which demographic background, children's television viewing, parent's television viewing, number of television sets in the home and parental limits on children's viewing predicted IQ reading scores, time spent reading, the number of books read and school behaviour (attentiveness, enthusiasm, imagination, as measured by teachers rating).

The results demonstrated that light to moderate television viewing influences reading habits, although it need not interfere with reading skills. The findings clearly indicated that the types of programme that children watch are important even for children who are relatively light viewers.

Ahmad (1980) in his study on effect of television of study hours of Pakistani children, interviewed 94 television and 50 non-television children, 7-15 years old. Results show that television subjects studied at home for shorter hours than non-television subjects and that television subjects, only completed their school home work, in contrast to non-television subjects who devoted more time on school home work and self-study.

Eisler and Loye (1980) in their article on childhood and the chosen future, considers that the children who are being socialized by television, the family, schools and other influences will be the parents of the children of the 21st century. The negative and positive consequences of television for children and research to support these effects are discussed ; negatively, the influences of violence, fear anti-social behaviour and alienation and positively, the effects of pro-social behaviour, decent role models, diversity of characters and situations and movements away from rigid stereotypes of human characteristics and behaviour. The most important positive effects of television is considered to be movement away from partiarchal cultural hegemony toward a democratic familial norm.

Gadberry (1980) conducted a study on effects of restricting first grader's television viewing on leisure time use. 30 middle-class 6 year-old matched for sex, age, pre-test IQ (Wechsler pre-school and primary scale of intelligence) and television-viewing time were blindly assigned to a restricted television-viewing group or an unrestricted group. Restricted parents halved subjects previous television-viewing rates and interacted with subjects 20 minutes per day for 6 week period. Unrestricted television parents provided similar interactions but did not limit viewing. Results tentatively suggest that television restriction enhanced performance IQ reading time and Refective Matching Familiar Figures Test scores.

Gunter (1982) in the article 'does television interfere with reading development', reviews evidence on the negative effects of television on reading development and examines the medium's potential as an instrument for positive attitude towards reading and academic work. Research has shown that television viewing not only affects academic efforts, but may also have a profound effect on cognitive development with serious implications for the child's ability to learn effectively in formal educational settings.

Williams, Haertel, Haertel and Walberg (1982) assembled 274 correlations spanning 26 years from 23 educational and psychological review articles, doctoral dissertations, state-wide assessment national surveys, technical reports, books, and unpublished papers in order to integrate empirical findings concerning the impact of leisure time television on student achievement from kindergarten through grade 12. For each study characteristics of the sample, type of outcome, quality of the study method of collecting viewing data, mean hours of viewing and strength and direction of observed relationships were coded. The overall correlation of hours of televiewing and achievement was negative but small. Regardless of sample size, year and location of the research, the effect remained consistent. The overall effect, however was not constant across the range of viewing times. The effects were slightly positive for upto 10 hours of viewing a week, but beyond 10 hours the effects were negative and increasingly more deleterious until viewing time reached 35-40 hours, beyond which additional viewing had little effect. Females and high IQ children were more adversely affected than other groups. Results may reflect differences in the kinds of activities displaced by television or in the kinds of programmes viewed.

Rubinstein (1980) mentioned the research conclusions of the 1982 NIMH report and their policy implications. It was mentioned that the most widely publicized conclusion of the 1982 NIMH report was no televised violence, i.e., the violence on television does lead to aggressive behaviour by children. The effect of television-viewing on educational achievement and aspiration have also received some attention. Findings are more suggestive than definite. It does seem likely that heavy viewing relates inversely to school achievement. At the same time heavy viewers with low IQs and/or from family settings in which intellectual stimulation is low may be actually be learning more from television relevant to school subjects than they would without that input from television. High I Q students who are heavy viewers may show less school aspirations. However all of these relationships are complex and subject to other concurrent influences.

Fetler (1984) examined the relationship between television viewing and school achievement. A previous study of ove 10,000, 6th graders by the California Assessment Programme (1977) was used to examine the relationship of television viewing to student achievement in reading, mathematics, and written expression, taking into account related variables such as study habits, characteristics of the home viewing environment and social class.

Results show that heavy television-viewing affected school achievement most significantly for subjects who were more socially advantaged. Subjects who viewed more than 6 hours per day of television had significantly lower achievement scores in all 3 content areas ; however subjects who watched relatively moderate amount of television had higher achievement scores than those who reported watching less television. The profile of the heavy viewer that emerged from the present findings indicated that heavy viewing habits were also characteristic of the family unit. It is suggested that there is a threshold amount of television-viewing beyond which television has a negative association with achievement. Viewing of more than 4 hours of television daily was associated with lower achievement for all subjects.

Singer, Singer and Rapaczynaki (1984) observed 63, 4-year olds during play and scored for aggression. While their parents maintained daily logs of subjects television viewing for 2 week periods to examine ways in which subject's family life and television viewing combined to predict aspects of their conscious experience, social interaction patterns and behaviour. It was hypothesized that several variables—including parental use of power or physical punishment, disorderly household routines, heavy television viewing (especially for action-adventure programmes) in early childhood and unrestrained television-viewing, would combine to predict subject's later aggressive or restless behaviour, poor school adjustment restlessness and poor self-restraint, and belief in a frightening world.

Results shows that subjects who spent more time watching television (especially more violent programmes) were less likely to show self-restraint. Heavy television viewing was significantly associated with subject's later aggressive behaviour restlessness and belief in a frightening world. It is concluded that parents, educators and industry representatives must take into consideration the possible consequences of unrestrained television viewing on early school-aged children.

Keith et al., (1986) examined the direct and indirect effect of television time, home work and parental involvement on high school seniors' achievement using 28,051 high school seniors selected from the data set of the high school and beyond longitudinal study conducted by the National Opinion Research Center (1980). Data indicates that home-work had an important positive effect on student achievement and television time had a smaller, negative effect. Parental involvement had no direct effect on senior's achievement scores but did positively influence the amount of time that seniors spent on home-work. Further analysis suggested the possibility of low home-work demands and of excessive week day television-viewing.

Singer and Singer (1986) examined some of the ways television may influence the imagination, motor activity and aggressiveness of pre-school and early school-aged children. A model is proposed in which family and personal variables influence the growing child's response to television. On the basis of the results of empirical studies that investigated family influences, it is concluded that television may contribute to children's restlessness, dysphoria, fears about daily dangers and their proneness to aggression.

Hodge and Tripp (1987) in their contact with teachers found that, they are as a group very concerned about a number of problems they believe to be the result of television viewing. These concerns are well shown by a survey of more than 800 kindergarton to early secondary teachers in South Australia (Australian Council for Children's Film and Television, Biggins, 1981) which produced the following conclusion.

In summary, it was found that 46.2 percent of teachers were concerned about physical effects, 98.7 percent about mental effects, 62.4 percent about social and personal effects and 90.7 percent about attitudinal and behavioural effects. The chief area of concern was lack of imagination and creativity (mentioned by 55 percent of teachers), The category include inability to make own play activities or organise time or motivate themselves, passivity, reliance on television for stimulation, lack of intiative, watching rather than doing.

The next most commonly mentioned areas were fatigue (including irritability, crankiness, tired school performance, lack of energy), lack of physical fitness (including obesity, poor physical developmant) lack of communication skills (poor vocabulary, lack of language development), copying undesirable behaviour (use of violence and bad language), loss of personal experience (not participating in active sports, hobbies or clubs), less time at learn home and family responsibilities.

The areas perceived by teachers are thus physical, social, attitudinal (or ideological) and cognitive. The teachers mentioned that one must agree that a child who has been up till 10.30 at night and who gets up again at 5.30 in the morning for the early cartoons is bound to be tired, listless and cranky.

Eron and Huesmann (1917), described the effect of television on children's behavior, especially an aggressive and prosocial behaviour. It is mentioned that heavy exposure to television violence is one of the cause of aggressive behaviour, crime and violence in society.

Studies Conducted within India

Mishra, Misra and Khaltri (1985) studied the effects of television-viewing on academic performance among 102, 6th-8th grade boys (aged 10·15 years) attending a junior high school in Lucknow, India. A questionnaire was constructed to obtain information on the amount and content of television-viewing and the importance of studies. Academic performance (grade obtained in annual and terminal examinations) was recorded from school records. Overall results indicate that television-viewing did not adversely affect academic performance. Television-viewing and academic achievement were positively related for the younger boys aged (10-12 years) but not for the older boys (aged 13-15 years). The results are compared with those of similar studies in other countries.

The consensus of above mentioned studies is that

1. Light to moderate television-viewing influences reading habits.
2. Television restriction enhances performance of I Q reading time, home work and self study.
3. The effects of television-viewing were slightly positive for upto 10 hours of viewing a week, but beyond 10 hours the effects were negative and increasingly more deleterious until viewing time reached 35-40 hours beyond which additional viewing had little effect.
4. From the studies on relationship between television-viewing and academic performance, it is clear that television-viewing and academic achievement were positively related for younger boys aged 10-12 years but not for the older boys (aged 13-15 years). Heavy television-viewing seems to be affecting school achievement most significantly for subjects who were more socially advantaged.
5. Heavy television-viewing was significantly associated with subject's later aggressive behaviour and is one of the causes of crime and violence in society.

From the above points, one can say that heavy television-viewing appears to affect most children's scholastic performance adversely. though some are more affected than others and some are affected beneficially. The reported studies on television-viewing and aggressive behaviour in children would lead one to accept the proposition that under at least some circumstances, viewing violence increases the likelihood of some form of subsequent aggressiveness.

Children's Television-Viewing Behaviour

The amount of time children spend on watching television programmes varies from one nation to another, depending upon such factors as the length of time television is on the air each day, the availability of television receivers, the kinds of programmes broadcast, the length of the school day and other obligations children bear in terms of homework and household duties.

The following figures illustrate typical amounts of viewing in different societies. The average American child during the first 16 years of life spends more time watching television than he or she spends on any other activity except sleeping (Schramm, 1973). Shonborn (1976) reported that pre-school children watch more than three hours a day. Viewing time drops off when the child enters primary school, but markedly increases by ages 12 to 14, before it again drops off some what in the later teenage years.

British children average about half-an-hour less viewing time each day than American children, which is slightly more than the average time in most other European countries. Clermont (1985) reported that the average Japanese child watches television for two or three hours a day, with 16 percent of them viewing it more than four hours a day. However, during the primary and secondary school years, children through out the world increasingly view programmes designed for adults.

The following are some of the studies dealing with children's television-viewing behaviour.

Studies Conducted Outside India

Himmelweit and her co-workers (1958) studied 4,500 children of two age groups 10 to 11 and 13-14 in four cities in England. They took a group of viewers with television sets in their homes and another group of non-viewers matched in sex, age, intelligence and social class. They found that on an average children spent about two hours a day watching the television programmes. This was more than any other single leisure time activity. Saturday nights was the favourite viewing night, since they did not have to prepare their class work for the next morning. The investigator report that they did not find any significant difference between the children from the middle-class home and those from the working class homes. There were also no sex differences. However, intelligence seems to have some influence the higher the intelligence the less the viewing. It was also found that the child with many interests and the child interested in out door games viewed the television less than the child with few interests. For all children it was found that the desire to join outdoor play and social activities was stronger than the desire to watch the television which took only the second place.

The investigator made a study to find out whether the violent programmes make the children more aggressive. It was found that there was no difference in aggressiveness between the viewers and non-viewers.

Schramm, Lyle and Parker (1961) conducted eleven separate studies between 1958 and 1960. The first study was funded by the San Francisco school system to gain information about the use of television by children in grades one through six. On the basis of the results obtained that first study, subsequent funding for additional studies was provided, mainly by the National Education, Television and Radio Centre, Overall the researchers collected data from 5,991 students, 1,958 parents and from several hundred teachers, officials and other knowledgeable persons in ten communities in the United States and Canada.

Schramm, Lyle and Parker (1961) found that 37 per cent of three year old children were regular viewers compared to 82 percent of the five-year olds, 91 per cent of those age six and 96 percent of the nine year olds. The "average" three year old spent about 45 minutes a day watching television. By the age of five, however, viewing time had increased to a little more than two hours per day. Between their sixth and tenth birthdays, children viewing time slowly increased to about two and one and half hours each day. When the children reached eleven or twelve, viewing time suddenly jumped to three or four hours daily, at this point, however, it began a slow, steady decline which continued throughout adolescence. These figures were for week days. Weekend viewing average were higher, ranging from half an hour to an hour longer. In addition, the authors cautioned that their figures were conservative. Yet they also noted the cumulative situation : they observed that "from ages three through sixteen children spend more total time on television than on school. In fact, they are likely to devote more time to television than to any other activity except sleep."

Schramm, Lyle and Parker (1961) posited three primary reasons, why children watched television : 1. for entertainment, 2. for information and/or, 3. because of its social utility. They reported that some children appeared to quiet compulsive about television. Such children were vaguely ill-at-case when they missed a favourite programme, or when some programme, or performer they particularly liked was off the air.

Schramm, Lyle and Parker concluded that overall the effects of television pointed as much to the parents as to television. Parents who provided their children with warm, secure relationship and an interesting home life had little to fear from television.

Streicher and Bonney (1974) conducted interviews with groups of children who ranged in age from six to twelve at two summer day camps, one for boys the other for girls at Lake Forest, Illinois. The children were asked "which programmes do you like best ?" or "what are your favourite programmes televised ?" and what kinds of programmes they disliked. The favourite programmes of children tended to be cartoon, fantasy, situation, comedy and drama. At all ages boys said they liked cartoons more often than did girls. For both boys and girls, the popularity of cartoons decreased as they became older. Corresponding to this decline of preference for cartoons, there was an increase in mentions of adult-drama programmes as favourities, with boys of all age mentioning them some what more often in their discussion with the groups than girls. Parental control of the viewing pattern of children was rather in frequent.

Terry and Paul (1975) tested the hypothesis that, the amount of time spent watching television would be significantly related to the strength of traditional sex role development. The subjects were 40 boys and 40 girls (all white) recruited from four elementary schools In a predominantly middle-class suburb of St. Louis. Ten boys and ten girls were sampled at each of four grade levels. kindergarten, 2, 4 and 6. Half of each group of 10 were classified as high television watchers (25 hours or more per week) and half as low television watchers (10 hours or less per week).

A television watching survey form was constructed on the basis of the television guide for local stations from the preceeding week. A list was made of all programmes between 7 a.m. and 11 p.m. on all channels during the previous seven-day period. At the end of the survey form two questions dealt with (a) the typicalness of the previous week's television watching and (b) the number of hours per week the subjects usually watched. The It scale (Brown, 1966) was used to measure strength of traditional sex role development.

The results showed that a high amount of television watching are clearly associated with stronger traditional sex role development. It was also found that this relationships holds equally for boys and girls and it does not change with increasing age.

Frederick (1977) conducted an experiment where subjects were randomly assigned to one of the following conditions.

1. Mother providing comments about television programming while viewing with her child.
2. Mother viewing with her child but providing no comment.
3. A female adult providing comment about television programming while viewing with a child.
4. A female adult viewing with a child but providing no comments.

5. A child viewing with a peer, with no comments provided and
6. A child viewing alone.

Comments were made before, during and after the viewing, of the stimulus. Comments described what occured in the stimulus and condemned violence. The stimulus depicted, shooting scenes taken from two movies shown on network television during 1976-77. Children (n = 132) 6-8 years of age participated in the experiment. Each treatment condition contained 11 males and 11 females.

After viewing the stimulus each subject played a game in which he/she could either help or not help some one. A post viewing co-operation measure of duration and frequency for helping and non-helpang behaviour was obtained. Subjects were then interviewed, to determine how much of the stimulus could be recalled and if they perceived violence occuring in the stimulus as inappropriate.

One-way ANOVA was used to each dependent measure, where F ratio were significant, post hoc comparisions determined which condition (s) contributed to their significance.

Findings of the study indicate that comments can increase the amount of information children can recall from television programming.

Krish et al.. (1980) investigated the relation between television-viewing habits and personality traits of 64, 14 year olds in West Germany. It was found that subjects viewed television programmes more than 15 hours per week ; the amount of time that was spent for viewing and the various personality characteristics were not correlated ; in general subjects preferred entertaining and thrilling television programmes ; and there was a positive relation between the amount of observed television violence and reduced anxiety as well as increased aggressiveness of subjects.

Neuman (1980) examined the relationship between listening and television-viewing in 200 pre-schoolers to determine if the amount and content being viewed affected the growth and development of listening behaviour. Intelligence and listening skills were assessed using the Peabody Picture Vocabulary test and the listen to the story subjects of the CIRCUS pre-school battery (Educational Testing Service, 1975), respectively. The listening subject was administered as post-test after 8 months. The family of each child completed television logs recording the shows watched for a 2 week period, 3 times during the year.

Results indicate that the total amount of television viewed was not a significant factor, in the improvement of listening skills. An analysis of television content however yielded a negative relationship between the amount of news and documentaries watched and listening change scores,

Singer, Zuckerman and Singer (1980) designed a study in Connecticut to develop, implement and evaluate a series of eight lesson plans that would teach third, fourth, and fifth grade children to understand television and to use their interest in it in conjunction with reading, writing and discussions skills. In addition, they also sought to evaluate the relationship between family background and children's viewing habits, since Past research suggests that children of these ages may be especially influenced by parental attitudes.

The results showed that children's television-viewing ranged between 1 and 40 hours each week ; the mean was 15 hours, which is considerably below the national average of 20-30 hours for their age group. Parents viewing averaged 10.5 hours each per week. There was a consistent relationship between parents' and children's viewing. Also important was the finding that parents were very influential models for the amount of viewing and attitudes toward television that children displayed. In addition, the parents apparently influenced their children's perceptions of the importance of television. However, the strength of the relationship between television-viewing and the examples set by the parents, as compared to expected predictors such as parent's educational levels, mother's employment status of children's IQ, suggests that there is a reason for concern at all socio-economic levels.

The study suggests that children can be taught about the medium in the regular school curriculum by tying in their natural interest in television with exercises in reading, writing and critical thinking.

Zuckerman, Singer and Singer (1980) assessed, 155 3rd 5th graders interms of their racial and sex-role attitudes, family television-viewing habits and demographic background. Subjects completed the Katz-Zalk Prejudice test. Stepwise multiple regression analysis indicate that subjects and parent's viewing of specific types of television programmes predicted subjects racial prejudice and girl's sex prejudice. Subjects IQ and mothers' educational attainment and employment status also significantly predicated subjects' attitudes, but age, grade level, family constellation, fathers' educational attainment and mothers traditional/non-traditional careers did not.

Braith Waite and Holman (1981) investigated the home television-viewing patterns of 282, 3-6 year old pre-school children attending child centers in Australia. By means of parental reports, data were collected on the following issues. (a) how much television subjects of this age range viewed, (b) the behaviour subjects engaged in while watching television, (c) the programmes they enjoyed most and (d) the extent to which subjects copied and idolized things seen and heard on television. Differences in viewing pattern were clearly evident with subjects from lower socio-economic families tending to be higher viewers, to engage in more distractable behaviours as they watched television and to be less impressed by educational programmes. Additionally, boys watched more television than girls and single subjects watched more than subjects with siblings.

Ribeiro de Almeida and Aparccido da Silva (1981) studied the predilection and habits of Brazilian children (ages 7-12 years) that watch television. The sample was composed of 145 families. A questionnaire was used to investigate the following topics; education level of parents, daily time period that subjects prefer to watch television, type of programmes they prefer and other activities in which subjects participate. Results indicate that subjects watched television for about 4 hours/day and preferred 12-6 p.m. for their viewing period. Comedies, adventure stories, violent moves and soap operas were the preferred programmes.

Rubinstein (1981) in reviewing the book on "Television and social behaviour ; beyond violence and children", mentioned that content specific effects such as that of televised violence are rarely as specific or undimensional as they initially seem. Not only do the viewers bring their own attitudes and beliefs to the process of viewing, but also there are other conditional processes which modify the nature of those effects. The context in which the viewing takes place (whether parents are watching with their children), the pre-disposition of the viewers (whether they are already highly aggressive) and even the sex and social class boys and lower class children show larger effects) can modify the effects of television viewing.

Buerkel et al., (1982) investigated the relationship between children's exposure to television potrayals of communication behaviour among family members and their expectations about the real life occurence of such behaviour in family settings. Television content, children's perceptions, parental questionnaire responses of 648, 4th-8th graders. Results indicate that children who frequently watch family shows appear to believe that families in real life show support and concern for each other. Parents' positive interventions, such as guiding their children toward family shows, viewing with them, commenting on show content and maintaining control over the amount of viewing, can enhance what children learn about affiliative behaviour from viewing family television shows, Parental guadance also can limit learning about non-affiliative behaviour from television families.

Eron, Huesmann, Brice, Fischer and Mermelstein (1983) conducted a 3 year longitudinal study with two large saplesm of elementary school youngsters overlapping in one grade. The original group of subjects comprised 672 children in the public schools of Oak Park illinois, an economically and socially heterogenious suburb of Chicago and 86 children from inner city school of the Chicago archdiocese.

All children were tested in their classrooms in three hourly sessions, a week apart in 1977, 1978 and 1979 It was thus possible to trace developmental trends from grades 1 through 5 on the following variables ; aggression, frequency of television-viewing, extent of violence viewed on television ; judged realism of television programmes and preferences for masculine, feminine and neutral activities.

Those data support the theory that there is a sensitive period at around age 8-9 years during which the effect of television can be especialiy influential in affecting a child's behaviour.

Frequency of television-viewing also seems to vary with age and again the results are similar for boys and girls. On the whole, girls tend to watch television less than boys. Frequency of viewing television in general and violence in particular, increases through third grade and then decreases.

Field and Anderson (1985) conducted a study on instruction and modality effects on children's television attention and comprehension. 80, 5 and 9 year olds viewed television programme containing segments emphasizing visual auditory or audio visual information. Half the subjects were instructed to remember for later testing and the other half to watch for entertainment. Results show that instructions increased visual orientation and cued recall in younger subjects and free and cued recall were enhanced in older subjects. Visual orientation and recall of auditory content were positively correlated at both ages, but the association was significantly stronger in younger subjects. It is concluded that even 5 year olds are capable of modifying their television-viewing behaviour in response to task demands.

Hopkins and Mullis (1985) conducted a study on family perception of television-viewing habits. 24 mother-father-child triads were interviewed individually to determine television-viewing patterns over a 4-evening period. The 15 male and 9 female children were aged 3-6-6, years A measure of concordance about co-viewing between members of the triad showed that both boys and girls were more concordant with their fathers than with their mothers. Age differences were not significant for either sex.

Anderson et al., (1986) videotaped the television-viewing behaviour of 99 families, each of which had a 5-year-old child by automated time-lapse recording equipment placed in homes for 10 day periods. The 99 families included 190 adults (aged 18-62 years) and 270 children (aged 0-17 years). Result from time-sample analyses of 4,672 hours of recording indicate that the television-viewing room contained no viewers 14.7% of the time that the television was on. There were no age-trends in time spent with television. Percent visual attention to television increased greatly across the pre-school years leveled off at about 70 per cent during the school-age years and declined in adult hood. Men looked at the television more than women. There were no significant correlations between time spent with television and percent of visual attention to television during the pre-school years is consistent with theory that television programme comprehensibility is a major determinant of attention in young children.

Du Lanyu et al., (1986) conducted a preliminary study of television programme preference and the ability to comprehend television programmes and programme preference in 119 boys and 121 girls 3-10 years old. Subjects were devided into 8 age groups. Each consisting of 30 subjects. Each age group was sub devided into 3 groups each of which took turns viewing different types of animated programmes, children's movies and adult programmes. The ability to understand television programme was found to increase with age. Subjects aged 3-4 years had no comprehension of television programmes. Ability varied significantly from ages 5 to 10 years. Of the 3 types of programmes, animated programmes were understood the best and adult programmes were least understood. Most subjects preferred animated programmes. Children aged 9-10 years tended to prefer children's programmes. Children younger than 10 years generally disliked adult programmes.

Neuman (1986) analyzed the relationship between the home learning environment and children television-viewing and leisure reading preferences. From an initial survey of media habits involving 122, 5th graders, 59 subjects were identified as representing either the upper or lower quartiles in the following categories : (1) Heavy television-viewing-heavy-reading, (2) Light television-viewing-heavy reading (3) Light television-viewing-light reading, (4) Heavy television-viewing-light reading. A 93 item home environmental questionnaire, designed to measure parent-child interaction in 7 categories (work habits, parental academic guidance, diverse leisure activities, parental expectations, independence and responsibility, stimulation in the home media behaviour) was individually administered to parents. Responses were analyzed using a clustering technique to provide an in-depth profile of the 4 media patterns.

Results indicate that media-related behaviour was strongly tied to certain characteristic family patterns. Children appeared to internalize media behaviour and attitudes manifested by their parents.

Selnow (1986) examined the relationship between television-viewing and the learning of expectations for problem resolutions in 349, 11-16-year olds. Data from self-administered questionnaires indicate that among heavy viewers, there was a perception that problem in real life is resolved in a manner consistent with the way television depicts them. Problem resolutions are certain and they are achieved quickly. The perception was consistent even when controlling for age and sex of the subjects. Observational learning theory is proposed as a possible explanation for these findings.

Tucker (1986) studied the extent to which light, moderate and heavy television-viewing related to multiple measures of obesity and physical fitness among 379 males (mean age 15.7 years). Light television viewers scored significantly better than heavy viewers in a composite fitness and on pushups, pullups, side step, situps and jog-walk considered individually. Light viewers performed better than moderate viewers on the composite fitness measure and on pushups, pullups and jog-walk. Light viewers displayed a strong but insignificant tendency toward better fitness, than moderate viewers on long jump, situps und side step tests. Light viewers were not significantly less obese than moderate or heavy viewers. It is concluded that for purposes of good physical fitness. television-viewing should be limited to one hour or less per day.

Anderson, Choi and Lorck (1987) analyzed the conditional probability of maintaining television during distraction in 29, 3-ycars olds and 30, 5 years olds. Subjects were presented with an audio-visual distractor stimulus during television-viewing. Looks at television and toward the distractor and non-looking periods (pauses) were measured. Results indicate that (1) the longer a look at television was maintained the greater its probability of being further maintained. (2) If a look was maintained longer than 15 sec, probability of distraction was reduced and (3) Reaction times (RTS) for head turns toward the distractor after long television looks were significantly slower than after short looks. Results for pauses were similar. Finding support the concept of attential inertia in television-viewing.

Tangney (1988) examined the relations of children's television content preference to children's perceptions of parent-child conflict and parents' child-rearing attitudes. Subjects were white male and female students from a large Los Angeles public elementary school. Data from 165, fourth-fifth and sixth-grade students were collected. Questionnaires accompanied by a letter briefly explainied by a letter briefly explaining the focus of the study were sent to parent who provided addresses on their child's permission form. These questionnaires included the adult/adolescent parenting inventory, a section on parental supervision of children's television-viewing and demographic information.

Birariate correlations and t-test were eomputed for analysis. Results showed that children whose parents reported more dysfunctional parenting attitudes tended to view more fantasy fare ; more children programming, including violent cartoons more vident programming in general, more super hero programmes, and more longer programmes than children whose parents reported adaptive parenting attitudes. The amount of time devoted to news and educational programmes, in absolute terms, did not appear to be related to parenting attitudes. Thus the results indicated that parental empathy, sensitivity and apaptive role expectations were inversely related to children's preference for fantasy-oriented content and children's programming, particularly among males. Parental supervision of children's television-viewing behaviour did not appear to mediate the relation between dysfunctional parenting attitudes and children's viewing patterns.

The review of Indian studies on this topic is not possible as reported studies were not available.

The reported studies on children's television-viewing behaviour indicated the following points :

1. The amount of time children spend looking at television programmes varies from one nation to other.
2. Television-viewing behaviour of children varied depending upon intelligence, age, sex, and social class. Higher the intelligence the less the viewing. Lower socio-economic families tending to be high viewers. Boys watched more television than girls. Frequency of television-viewing seems to vary with age.
3. The favourite programmes of children tended to be children's programmes, cartoons, fantasy, situation comedy, dramas and adventure stories.

4. There was a consistent relationship between parents and children viewing. Children appeared to internalize media behaviour and attitudes manifested by their parents. The amount of time devoted to news and educational programmes in absolute terms did not appear to be related to parenting attitudes.
5. The ability to understand television programmes was found to increase with age.
6. It seems that for purpose of good physical fitness, television-viewing should be limited to one hour or less per day.

From the above points, it can be said that children exhibit several different patterns in their use of television patterns which changed as the children grew older. Thus there were considerable difference in children's television viewing behaviour and these difference were not simply the result of age but also varied in accordance with the child's sex, mental ability as measured by 10, social class background and the quality of each child's social relations with parents.

3. The Impact of Electronic Media (Television) on Young Viewers

The rapid extension of television to all parts of the world has stimulated a great quantity of research about the impact of television on the developing child. Television is the first mass-produced and organically composed symbolic environmeut into which all children are born and in which they will live from cradle to grave. The special impact of television on society and its potential for teaching children have led George (1978) to refer to it as a source of vicarious socialisation that tends to compete with the acknowledged agents of; socialisation in providing influential models that may be emulated. It has also been argued that the power of the medium is so great that children change their attitudes about people and activities to reflect those encountered in television programmes. This medium is therefore more entertainment for children (Kunhi Krishnan, 1990).

The following studies focus some points about the impact of television on children.

Studies Conducted Outside India

Maccoby (1951) conducted a study on "televisions its impact on school children". The study is based upon open-ended" interviews with 332 mothers of school children in the city of cambridge, Massachusetts. The sample is a probability sample, chosen through the use of area sampling method. The sample was confined to families with children between the ages of four and seventeen. The sample includes both families which have television and families which do not. Mothers in both groups were asked to describe in detail the activities of each of their children during each hour on the week day before the interview and on the sunday preceeding the interview. Such activity records were obtained for 622 children in all. For comparing the typical activities of television children with those of non-television children, the groups were matched with respect to age, sex and socio-economic status. The interviewing was done during December 1950, and January and February 1951.

The major findings of the study may be summarized as follows :

1. Ownership of television in Cambridge is clearly related to the family's income, education and occupation. Professional people (a very small group in proportion to the whole population) are not buying television because they do not like the programmes and are apprehensive about its effect on their children. A sizeable majority of all other groups, however. including business people white collar groups, skilled and unskilled labourers etc; are television owners, the lowest income group has somewhat fewer owners, but these people like television and except to buy it as soon as they can aftord it.

2. Cambridge children in television owning families are spending, on the average, at lenth 2½ hours on weekdays and 3½ hours on Sundays, looking at TV programmes.

3. Television brings families closer together in the sense that they spend more time in each other's presence after they acquire a television set. However, there is very little interaction among family members when they watch television together, and the amount of time family members spend together exclusive of television is reduced, so it is doubtful whether television brings the family together in any psychological sense.

4. Contrary to some claims, children do not spend more time with children of their own age once they have television. The trend is for children who have television to seperate and watch tolevision in their own homes rather than watch as a group, so that as more families acquire television, children spend less time with their playmates.

5. As compared with other activities in the home, television is absorbing. In general, people do not carry on other activities in the same room when a programme is on. Most television sets are located in the living room, which is kept in semidarkness when the set is on, and nearly all owners have their sets on at sometime during the after supper hours each day. This means that reading, play and conversation are at a miximum in the living rooms of television homes during the evening.

6. Many parents have difficulty in getting children to leave the television set to come to meals: and some have solved this problem by serving meals to the children in front of the set. One-sixth of the families interviewed reported doing this every night, and half do it on occasion.

7. Bedtime is a fairly serious problem for television parents, and children of the same age in homes without television.

8. Television interferes very little with home-work. Parents generally insist on their children's finishing their home work betore they look at television, and virtually none of the children attempt to do their studying in the same room with the television set when someone is watching a programme. The number of children who do home-work on Sundays is somewhat smaller in television than non-television homes, but on weekdays, television children seem to spend approximately the same amount of time in study as non-television children of similar ages and family backgrounds.

9. Childern are substituting television for radio, movies, and reading to a significant extent. Children who have television spend so much more time watching it than they formerly spent with the other mass media that their total exposure to mass media has doubled.

10. While some television time Involves a shift from other mass media to television, much of it is taken from play time, and some from helping around the house, practicing musical instruments, and other forms of activity which might be called "creative" or "productive".

11. Parents who have television in their homes do not feel it has been harmful to their children, on the contrary they believe it has many advantages. First of all, they enjoy television for the entertainment value. They also find many of the programmes educational both for themselves and their children. But beyond this they find it a great help in taking care of the children, they say it keeps them in off the streets, and generally keeps them from harassing their parents. Parents very commonly use television as a "pacifier".

Comstock (1978) examined the impact of television on American institutions. According to him television's presence in the American home has brought many changes in family life and the rearing of children, including new patterns of interaction, alteration of activities and vicarious socialization. The most obvious effect of television is the introduction of a variety of images, statements and potrayais in to the home. One strand of this evidence is the amount that children view and the content itself. Comstock opined that children typically are heavy viewers, and most of their viewing is of general audience or adult programming: the average of children of elementary school age is 27 hours per week. Television presents the viewer with a world that often is at variance with one he/she inhabits. This is particularly so far children, whose experience and knowledge are limited. Thus what television conveys often has no corrective in actual experience.

A second strand consists of studies of the information derived from television by children. Children learn from television the names and specialities of pop entertainers.

The third strand is made up of several dozen laboratory-type experiments that demonstrate that children of nursery school age can acquire new ways of behaving from television. The implication of these experiment is that television can alter the repertoire of possible behaviour on which children will draw in a future situation. It may be concluded that television appears to function in America as an agent of socialization.

Murray and Kippax (1978) conducted a study in three towns that were similar in size and social structure but different in the magnitude, duration, and content of the television experience.

The high-television town had 5 years' experience with two channels (commercial and public), the low-television town had one year's experience with one channel (public) and the no-television town did not receive a televion signal. This study was designed to explore the impact of televion in terms of contextual variables, such as children's media use, perceptions of television structure and function and patterns of social behaviour in relation to variations in the magnitude, duration, and content characteristics of the child's contemporary experience.

The three towns selected for study were located in rural areas of the states of New South Wales and Queens land. Information obtained from the 1971 census indicates that these three communities do not significantly differ in terms of total population, housing conditions, ethnic composition, and socio-economic level.

The basic sampling unit was families with children 12 years or younger. Families were sampled from lists compiled from electoral rolls, town canvassing, school enrollments and district hospital birth records. A total of 282 families was interviewed in three towns as follows : high television (82), low-television (102), no-television (98).

The results showed that when television is relatively novel, as in the low-television town, it is associated with a marked decrement in a wide range of activities. However. those children who have experienced television for a relatively longer period of time (e.g., five years in the high-television town) tend to return to their former levels of interest in other media and social participation opportunities. Television's impact on the lives of young children was thus found to be related to both the content viewed and the context of viewing.

Robinson (1981) examined the role of television in the leisure lives of Americans.

To answer the question "Did television in the 1970s occupy the same place in liesure time use that it had a decade earlier or had it entered a period of audience decline" data from the university of Michigan Survey Research Centre's 1975 replication of the 1965 study were compared to results from the 1965 study.

The 1975 study employed the "yesterday" rather than "tomorrow approach to collecting diary data.

Respondents in urban employed house holds in the 1975 Survey Research Centre study reported 2.2 hours as a primary activity. This was significantly higher than the 1.5 hour figure reported by comparable respondents in 1965. Television also accounts for most of the 57 minute increase in free time between 1965 and 1975.

The results show a more curvilinear relationship with the grade school respondents reporting less viewing than those with high school education.

Television-viewing is negatively correlated with other at home activities (radio and hobbies, rest and relaxation, book/magazine reading, sleep) than the activities done away from home (entertainment outside the home, social visition, religion, travel).

These data make it hard to conclude that bo increasing their viewing, the public had enhanced the subjective quality of their leisure time or their lives in general.

Breen and Corcoran (1983) using perspectives from traditional and contemporary disciplines discuss the universality of myth and its functions within the frame work of television citing examples from television news coverage and popular culture. It is suggested that television realism acts as a silent weapon in the extension of certain ideologies over all other sections of society.

Kent (1985) conducted participant observation field work among families with and without television from 3 ethnic groups in the U.S. : Navajos, Mexican-Americans and Euro-Americans Typical days in the lives of these families are described, which illustrate the strong impact of television-viewing on the diversity of activities performed by the families and show that the families basic patterns of the use of space were note altered by telesion-viewing. Every family with television whatever the ethnic group, spent large amounts of time watching it. Television-viewing was the dominate evening and night activity and it reduced the diversity of activities.

Argenta, Stoneman and Brody (1986) investigated the impact of different television programmes on the social interactions and toy play of 36 pre-school children and observed same sex pairs of subjects during cartoons, sesame street and situation comedies. Subjects were also observed when the television screen was black. Subjects visually attended to the cartoons the most, sesame street less often and the situation comedy the least. Cartoons depressed social interactions. Sesame street elicited the most verbal imitation. Both sesame street and the situation comedy allowed subjects to devide activity among their peers. Girls verbally imitated programme content more than boys.

Gaddy (1986) studied the relationship between television use and academic achievement using data from the high school and beyond study by S.S. Peng et al., (1981). It was hypothesized that, for high school students as a group, television-viewing leads to lower achievement. Among the measures in the survey are tests of academic achievement, measures of leisure time use, and an assortment of indicators of personal and social context. The analysis technique used was liner structural modeling of 2-wave panel data. Results clearly replicate the consistent finding of past studies—a uniform and highly significant negative correlation between television and achievement. This relationship held across the entire series of achievement measures.

Green field and Roos (1988) in their first experiment compared the ability of radio and television to stimulate imagination. A total sample of 192 children from Los Angles country contained three equal sub-samples of middle and working-class children, black and white children and younger (first & second grade) and older (third and fourth grade) children. Schools were selected to draw students from homogenous areas in terms of social class and ethnicity.

All children were exposed to both stories. Half of the children of a particular age, class and ethnic group saw and heard an animated television version of Strega Nona (all white characters) and heard an audio version of a story ; the other half exposed to an animated television version of a story (with black characters) and an audio version of Strega Nona. Within a group of particular age, class and ethnicity, equal number of boy and girls were randomly assigned to each of the four treatment conditions.

The second experiment compared the ability of radio and television to transmit information. The same materials and design used in the first experiment were employed with parallel group of subjects. The story was introduced, and then the story was stopped just prior to its end. Immediately after the video or audio presentation, the experimenter asked the child to tell about what the child think is going to happen next. Each child's response was tape recorded and later transcribed.

Results has important implication for education. The fact that each medium has its own profile of cognitive advantages and disadvantages implies that a balanced education will utilize each one to do what it does best-audio to stimulate imagination and high light verbal information, video to transmit information in general and action in particular.

Scherer (1989) viewed that the main impact of video cassette recorder may be on the people's use of television itself. The first hypotheses he formulated for testing is that VCR adoption will be positively related to education and income and negatively related to age. The final hypothesis is that the extent and type of VCR will not affect owner's use of mass media for news and non-news senior content in any way that is not attributed to the socio economic status of the owner.

Over a thousand randomly selected New York state households responded to a mail questionnaire about their VCR and other media use in the summer of 1987. The final sample of 1,140 represented a 79 per cent response rate obtained using a three-wave mailing plus a final follow-up appeal. The original sample was slightly skewed (compared to censue data) toward higher education and income. The data were weighted by eduction, sex and degree of urbanity to correct for these sampling biases and accurately reflect census data—the weighted data are used in the analysis.

The Investigator feels that it is too early to draw conclusion about the future of the VCR based on the present pattern of adoption and use, VCR is unlikely to have a dramatic impact on the distribution of information in New York state.

Studies Conducted Within India

Vidya Sagar (1978) conducted a content analyses of Bombay television transmission from December 1 to 31, 1977. The analysis was done from two angles. Firstly, the programmes were assessed keeping in mind their audience wise targets. The maximum time was allotted for general programmes with subjects ranging from cabbages to kings. This came to 74 percent of the total transmission during one month. Next came children's programmes with 13 per cent of a month's transmission. The remaining time allotted was 4 per cent for youth, 4 per cent for women, 3 percent for rural audience and 2 per cent for the industrial workers.

The second aspect on which the analysis made was the significance given to the regional language that makes the medium effective. The children's programmes were made with alanguage break-up of 36 percent in English, 26 per cent in Hindi, 30 per cent in Marathi and 8 per cent in Gujarati. As regards youth, English took 28 per cent, Hindi 21 per cent, Marathi 37 per cent and 14 per cent in Gujarati. Women's programmes were 11 per cent in English, 33 per cent in Hindi and 57 per cent in Marathi.

This reveals that the regional language i.e. Marathi constitutes less than one third of the transmission except in the case of the women's programmes.

The investigator concludes that if television programmes are to be effective, instructive and informative, these imbalances have to be rectified. If television is a developing agent and not another entertainment medium like cinema, elite interests should be cut down. This needs a thorough change in the programme planning and need-based programmes for each target audience with regional language as the main channel of communication.

Hanumantha Rao (1984) conducted a survey on the impact of television in Hyderabad.' A total of 122 television households were covered and in each households, one adult (15+ years) was interviewed. Ninety-eight men and 24 women answered the call of the interviewers.

Regarding the social impact, it is found that television's impact on social contacts is discernible among 44 per cent of respondents. Thirty per cent acknowledged that because of television, they have curtailed their visits to friends/relatives on weekends. Fourteen per cent have completely stopped these social visits because of the presence of television at home.

The data show that there is wide-spread concern among parents (74 percent) about the undesirable influence of television on children's study habits. At the same time, 68 per cent of parents agree either fully or partly, that television has contributed to increased general knowledge of their children. Thus television seems to have a diverse and dichotomous influence on children. It disturbs their studies but it widens their horizons and contributes to increased general knowledge.

Narayan (1987) conducted a study on the "Impact of Television on Viewers". The study sample consists 300 families having television in Bombay city, chosen by random sampling method. The actual collection of data of the household and the viewer's reaction was through questionnaires containing both multiple choice questions and a qualitative nature.

Most of the viewers in the sample in Bombay city belonged predominantly to the middle income group, were aged between 35 to 45 years and included a large proportion of house-wives and retired persons. Education-wise, the majority had completed their schooling and were either under-graduates and above.

The viewers were asked if they had the habit of visiting their friends before they had acquired the television sets and if they continued this habit after they had purchased television sets. This was done to ascertain if television viewing affected family togetherness and reduced socialibility. On an analyse of the answers, it would appear that there was a distinct relationship between television viewing and socialibility.

In order to ascertain, if watching television had and adverse effect on children's studies, the viewers were asked if they felt that children preferred to watch television at the cost of their studies. 55 per cent admitted that children always neglected their studies and preferred to watch television.

Kunhi Krishnan (1990), Director of Thiruvananthapuram Doordarshan, in his article on "The Impact of Television" viewed that no other medium or institution since pre-industrial religion has had a comparable influence on what people of a tribe, community or nation have learned, thought or done in common. He opined that television exerts considerable influence on the lives of children and inculcates positive attitudes, values and behaviour though only less than five per cent of the total programmes aimed at them. He suggested that television is now one of the major institutions and the creative intent and design of the unplanned curricular messages to television should also be taught to children. If we fail to help children understand this medium and be wise consumers of it, we miss an excellent opportunity to capture the constructive social, education and recreational use of television. We also neglect our adult responsibility of socialising the young people of all classes to handle the audio-visual messages being presented about their culture and their role in it.

The above mentioned studies indicated the following points, about the impact of television and other electronic media on children:

1. Television brings families close together in the sense that they spend more time in each other's presence after they acquire a television set.
2. Television appears to function in America as an agent of socialization.
3. Television's impact on the lives of young children was found to be related to both the content viewed and the context of viewing.
4. The impact of television seems to be largely negative since it potrays and encourages violence and aggression and reduces social and verbal skills.
5. Television-viewing seems to be negatively correlated with other at home activities, than the activities done away from home.
6. Television-viewing seems the dominant evening and night activity and it reduce the diversity of activities.
7. Negative correlation is found between television and academic achievement.
8. Studies on television and radio showed that each medium has its own profile of cognitive advantages and disadvantages and a balanced education will utilize each one to do what it does best.
9. VCR seems unlikely to have a dramatic impact on the distribution of information in American society.

From the above review of a number of studies, it can be said that television has immense influence on familial and societal behaviour of viewers. There need still a lot of research about how far these influences are positive and how can these be interpreted and dovetailed in the larger interest of the economic and social well-being of the society.

4. Locus of Control, Television-Viewing and Academic Achievement

The term "Locus of Control" refers to a person's perception of where rewards are derived in his or her environment.

Some people believe that they are solely responsible for the rewards or reinforcements that their environment provides for them. These peoples are referred to as 'Internals' because their rewards are perceived to be under their internal control.

People who believe their rewards are due more to luck, chance, fate or other significant people in their lives are referred to as 'Externals'. Many years of research has established that there are fundamental differences between internals and externals, including the way that these two groups relate to the process of instruction.

Several studies have shown that internals generally tend to achieve higher grades than externals. Following are some of the studies dealing with this aspect.

Studies Conducted Outside India

Crandall and McGhee (1968) presented the data from five separate studies which investigated the relationship between various measures of expectancy of reinforcement and two measures of academic competence. Subjects ranged from junior high school to college age. Because, it was reasoned that height of expectancy should be partially determined by past grades and because that same expectancy should also constitute a motivational determinant of current academic approach behaviour, it was hypothesised that expectancy should relate positively to subsequent measures of competence. Significant relationships were obtained in all cases. It was suggested that a gradient of expectancy generalization may have produced the regularly increasing predictive power attained as similarity increased between the reinforcement on which the expectancy estimate was based and the criterion measures.

Loeb (1975) examined three models of locus of control development, First model suggests that for a child to see himself as having control, it is necessary for him to identity with, and imitate the behaviour of a powerful, controlling model. The second model can be labeled the role complementarity explanation. This model predicts that the result of a highly controlling parent is likely to be a submissive, dependent child.

The third model is reinforcement explanation i.e., relationship between internality of the child and the extent of use of positive reinforcement.

The subjects for the study were 45, fourth and fifth grade boys from white-middle-class infact families. Subjects were selected from the top and bottom 10% of the obtained distribution of scores on a modification of the Bialer Locus of control scale for children (Bialer, 1961). The mean age of the subjects was 10 year 7.2 months. The mean locus of control score for internals was 70 81 out of maximum 25. The mean locus of control score for externals was 11.13. The subjects were given a task and the parents were directed to aid the child as much or as little he wanted.

The results showed that role complementary model is particularly useful approach to understanding locus of control. Concerning modeling, the parent-child locus of control correlations were both positive although neither of them approached statistical significance.

Gordon, Jones and Short (1977) examined the relationship, at two developmental levels, between children's persistence time and both generalized and specific expectancies associated with LOC and skill and chance instructions. Task persistence was considered an academic behaviour related to a child's generalized expectancy of casual attribution. The relationship frequently found between a child's locus of control orientation and his or her academic achievement was believed to be due, at least in part, to the influence of locus of control on task persistance. To assess this possibility, the Nowicki-Strickland Internal-External Locus of Control scale was administered to 147, third and sixth-grade boys and girls. Of this sample, 96 children were given an anagram task with instructions that performance was due either to skill or chance. The effects of locus of control on persistance time differed for third and sixth graders and for boys and girls. Thus sex and age of the child were shown to be moderator variables in the task persistance-Locus of Control relationship. Skill and chance instructions had no effect upon persistence time. The results suggests that generalized expectancies associated with locus of control are related to persistance, whereas specific expectancies induced by skill or chance instruction are not.

Bouchalova et al., (1980) observed socio-economic changes in families that occured during the 1st 6 years of their child's life. Analysis indicated that the family's social background affected the children's school achievement and least obvious in average school grades. The greatest influence on children's scholastic success was exerted by parental education level, the least by housing conditions. Changes were greater in boys than girls.

Medway and Egelson (1981) conducted a study on teacher ratings of internal and external students in open and traditional class environments. 11 open and 11 traditional school teachers rated the achievements and behaviour of 469 students in their 3rd, 4th and 5th grade classes, on both measures (Intellectual Achievement Responsibility Questionnaire and Peabody Picture Vocabulary Test), girls were rated higher than boys and internals higher than externals. Sex interacted with school environment such that girls achievement ratings exceeded those of boys only in open classes. A predicted locus of control by environment interaction was not found for either achievement or behaviour rankings.

Faustman and Mathews (1981) examined the internality—Achievement relationship in a traditional educational system using 2,597 Indian 6th-8th grade students. Subjects were given the Academic Achievement Accountability Locus of Control Questionnaire and an academic performance test. Results demonstrate that the American findings generalized to the classroom environment in Sri Lanka. It is suggested that American results may be unrelated to modern educational changes, that instead they are consequence of an attribution that may possess cross cultural generality.

Kanoy, Johnson and Kanoy (1981) examined a group of academically bright (1 Q $\geqslant$ 116) 4th graders for positive relationships of academic achievement with locus of control and self-concepts. 20 achievers and 9 under-achievers received the Intellectual Achievement Responsibility Questionnaire (IAR and the Piers-Harris children's self concept scale. Two factor ANOVAS were used to examine the self-concept and locus of control scores with sex and achievement serving as the 2 independent factors. Achievers had significantly higher self-concepts than under achievers on the Intellectual and school Status sub-scale. In addition, achievers had significantly higher nternal control scores than under achievers for the IAR total score and the IAR positive score.

Ridley Chance and Cooper (1985) conducted a study on "Correlates of Children's Television-viewing : expectancies, age and sex". 319, 5th-8th graders completed a questionnaire on television-viewing habits and a measure of interpersonal trust and 108 of these subjects also completed the Intellectual Achievement Responsibility scale. Subjects who expressed less interpersonnal trust and less sense of self-efficacy in relation to home work tended to spend more time watching television. This relationship was not specific to any type of television content and reflected a broad pattern of distrust of parents, teachers, and peers as well as distrust of the wider social world, Both behavioural selectivity in viewing and expressed preferences for various types of programmes reflected the traditional sex-role patterns reported in previous studies. Television viewing did not appear to be an actively social pastime.

The above reported studies focus that there is a consistent relationship between locus of control, academic achievement and television viewing. The greater influence on children's scholastic success seem to be exerted by parental educational level and the least by housing conditions. Achievers has significantly higher internal scores than under achievers for the IAR total score and the IAR positive score. Subjects who expressed less interpersonal trust and less sense of self-efficiency in relation to home work tended to spend more time watching television.

The review of Indian studies on this topic is not possible as reported studies were not available.

Attitudes of Children and Parents Towards Television-Viewing

Television is a source of great deal of information and opinions, its potential to create images seems infinite. But television is rarely used in such a direct way. Just as children ignore it for much of the time it is on, so they ignore it mentally even when placed before it. Far from seeing television as a medium that has a direct influence, they see it is a forgettable means of entertainment.

Watching television is an activity that does not make heavy demands ; the sheer amount of time it takes up suggests otherwise. It is for this reason that the attitude of mind associated with watching television is associated with passivity (Cullingford, 1978).

Parents could have a great influence on the ways in which their childeren watch television; not only by controlling what is seen, but by influencing the ways in which children watch. Generally, parents share with their children the style of watching television; this itself is an influence on children's attitudes. Children can take on the views of their parents without being aware of it. Children can be taught to look critically at television by parents, their attitudes can be changed by the attention that parents pay to them (Cullingford, 1978).

Very few studies have been done regarding the attitudes of parents and children towards television viewing.

Studies Conducted Outside India

Maccoby (1951) in her study on "Television: Its impact on school children", interviewed 332 mothers of school children in the city of Cambridge, Massachusetts. She found the parents' attitudes toward television. A large majority say that if they were faced with the choice again of using their money for a television set or buying some thing, they would choose television. When asked specifically to name the disadvantages of television for a family with children, most owners were not able to think of a single disadvantage.

The non owners are devided in their attitude toward television; the families at the lower socio-economic levels approve of it and hope to get television when they can afford it, while a relatively small group at the upper and of the scale oppose it. Most parents who own television and even a large number of those who do not yet own it, consider television an unmixed blessing for themselves and their children.

Schramm, Iyle and Parker (1961) conduted a total of eleven separate studies between 1958 and 1960. Over all the researchers collected data from 5,991 students, 1,958 parents, and from several hundred teachers, officials, and other knowledgeable persons in ten communities in the United States and Canada. In their study, Schramm and his associates found that most children regarded television with both affection and respect. Their parents also showed similar attitudes toward television. When the authors conducted interviews in San Francisco with 188 families, each questioned together as a family unit, they asked each member of the family which of the media they would miss the most if they had to do without it. The overwhelming response was television for the whole family. Overall television was the most likely to be missed by parents and children alike; and television was the medium mentioned most frequently at every age, even though its relative importance declined during adolescence.

Bearling and Fullagar (1983) assessed children's attitudes to television advertisements. Five hundred and forty-five middle-class white boys and girls (mean age-10.67 years) completed a 28-item scale after viewing a television commercial. Initial analysis resulted in one item being omitted. Factor analysis of the remaining 27 items yielded two interpretable factors labelled enterainment and irritation-boredom. Two issues emerge-first children's and adult's attitudes to television advertisements differ some what. Second children view television advertisement almost entirely in terms of their entertainment function. This has important ethical implications. Children's purchase behaviour may not be manipulated by such advertisements because (a) their perception of their advertisements may not be consistent with the advertiser's primary intentions and (b) children are less entertained and more irritated and bored with such advertisements as they grow older.

Studies Conducted Within India

Suriakanthi and Meenakshi (1989) conducted a study to survey the views of parents on the advantages and disadvantages of television watching by children, the optimal time to be spent on television programmes suitable for children and suggestions toward minimising the ill effects of television on children.

The study was conducted with 150 parents. Of them 75 were fathers and 75 were mothers. The respondents were from Maduari City and were randomly selected on the basis of the criteria that they have had television in their house for a minimum period of one year and that they had atleast one school-going child. A questionnaire was used to collect their opinion. The questionnaire consisted of both open ended and close-ended questions.

Findings showed that no parent has said that television watching is bad for their children. Most of the parents feel that television has improved language development in their children. The greatest change observed by 82 per cent of parents in their is that their children do not 'pester' them asking to be taken to movies. Sixty five per cent of parents are of the view that the circle of their children's friends has grown since buying television as they tend to discuss the television programmes with more peers. Forty one per cent of parents feel that television has done harm to the social development of their children.

A large number (78 per cent) suggested that it is desirable for children to see television for a maximum duration of two hours and a minimum of one hour daily. Eighty per cent of parents are worried that television affects the home work of their children.

The suggestions given by parents for reducing the evils of television programmes include telecasting children's programmes only on Sundays and reducing programmes involving sex and violence. Majority of the parents (61 per cent) feel that television telecasting time must be cut down.

In general, it may be said that although many education and social scientists are concerned over the long-range effects of television on the children, the above studies show that large majority of parents are not concerned. Though some parents are worried about that television affects on the social development and home work of their children, no parent had said that television watching is bad for their children.

The statement by Schramm and his associates quoted below, cordially summarises the true effects of television.

> "For some children under some conditions, some television is harmful. For other children under the some conditions or for the same children under other conditions, it may be beneficial. For most children, under most conditions, most television is probably neither harmful nor particularly beneficial"

3

Statement of the Problem and Variables

> "Children today arrange their lives around the television set. They adjust time spent on play, sleep, meals and home work, according to television-viewing schedules and do other things with their eyes glued to the box".
>
> *Sevanti Ninan (1991)*

Justification

Television-viewing behaviour of children is not subjected to extensive research though it is felt that it is a very important area. The nature of the effects of different forms of visual media on children's psychological and social development is highly involved and the results are equivocal. A well planned study on the children's television-viewing behaviour and its effect on personal and educational development certainly throws light on the exact manner in which children view television and how the television viewing effects personal and educational development of children. The very pervasiveness that makes television an attractive research topic also makes it difficulty to study. Experimental and statistical controls for programme content, quantity of viewing, theoretically interesting background variables such as social class and intelligence are not easy to manipulate in research.

The attraction of television for school aged children has led to an increasing amount of research on the relationship between television viewing and educational development. Studies have been conducted on a limited scale on the viewing habits of children. Kunni Krishan (1990) mentioned that there has been a great deal of public speculation that television cuts into the time for school work and serious study and utimately affects academic performance. Studies have shown that most children adjust their study time to ensure that it does not clash with their favourite programme. No one knows for certain whether television watching would change attitudes or values. It was clearly not known whether television could creative passivity or aggression or whether it would enlarge or limit children's intellectual boundaries. Clearly, more research is needed to find out television's effects, particularly focusing on development of children.

Schramm (1961) expressed that there is something beyond age, intelligence and family which was affecting the children's viewing patterns. They believed that the missing element were the child's social relations and some of his or her personal characteristics. So there is a need to first identify the important behavioural components of television viewing patterns, and to determine how these components contribute to personal and educational development as indicated by their adjustments to family, friends, daily routine activities and scholastic performance. It is possible that all these things are interdependent and what ultimately matters may be a complex set of inter related variables.

From a practical point of view, a study such an envisaged here will throw light and demistify many myths and fads and provide a basis for effective parent education and guidance of children.

Statement of the Problem

Stated briefly the problem of the research is to evaluate the inter relationships among television viewing behaviour, personal and educational development in children. Also included in the scope of the problem is a study of parents' attitudes regarding the children's television viewing behaviour and explore the extent to which parents' views and children's views are similar and dissimilar. One of the anticipated consequences of such an attempt is to throw light on various beliefs and assumptions, held by children and parents regardihg the effects of television viewing, on children's emotional, social and cognitive development.

Objective:

The following are the objectives of the present investigation.

1. To develop tools for assessing television viewing behaviour and attitudes toward television viewing, by children and their parents.
2. To understand the influences of sex and socio-economic status on television viewing behaviour of children.
3. To compare children's view points with their parents, view points with regard to television viewing.
4. To explore the potential influences of television viewing upon the educational development of children.
5. To find out the relationship between internal or external motivational controls (locus of control), television viewing behaviour and educational achievement status of children.

Operational Definition of the Variables

Children

Children are operationally defined as those attending the school between the age range of 5+ and 10+ and who are having a television set in their home.

Television Viewing Behaviour

Television viewing behaviour is categorised under the following important behavioural aspects – 1. Types of programme watched, 2. number of hours spent for watching television, 3. distribution of viewing on regular days and week ends, 4. physical position while watching, 5. distance of watching, 6. other behaviour along with television viewing, 7. mode of watching, 8. control over choice of programmes for watching and 9. the emotional impact of either watching a programme or missing a favourite programme.

Locus of Control

Locus of control is a disposition, a generalized expectancy for internal or external control of reinforcements. It is concerned with attributing responsibility for success or failure at a task depending upen his/her initial expectation of success at the task. Those who have a disposition or belief to attribute to oneself some control over one's behaviour and reinforcement by ability, effort are known as internals. External control is the belief that events are caused by "external control"—luck, task difficulty, powerful others.

Intellectual Achievement Responsibility (IAR) scale, developed by Crandall, Katkovsky and Crandall (1965), is used to evaluate the child's locus of control. This scale is aimed at assessing children's beliefs in reinforcement responsibility exclusively in intellectual—academic achievement situations.

External Control, Low Internal Control and High Internal Control

The total '1' score on Intellectual Achievement Responsibility (IAR) scale is categorised as below :

Total 'I' Score Distribution	Category
Below 17	External Control
17 – 22	Low internal Control
22 and above	High internal control

Educational Achievement Status

Educational achievement status is operationally defined as the position of the child among its peers in the classroom with reference to the scholastic rating in terms of ranks and not the actual percentage of marks.

The following method was developed to assess the educational achievement status of children.

1. The ranks secured by the children were obtained from school records. This was converted into the relative standing with reference to the number of students in the class.

Note : The school system provides for ranking each child on the basis of the total marks obtained in the examinations conducted during the year.

2. The following five point scale was devised to assess the achievement.

Per cent position of the child from top to bottom among its peers	Score
Below 100 and above 95	5
Below 95 and abone 80	4
Below 80 and above 20	3
Below 20 and above 5	2
Below 5	1

Schematic representation of the scale is given below.

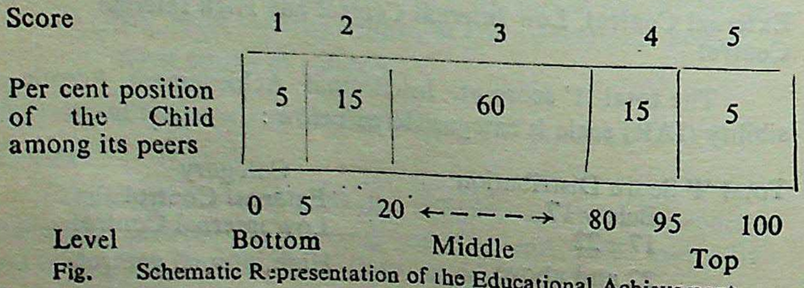

Fig. Schematic Representation of the Educational Achievement Status Scale

3. Each child in the sample is assigned a score by determining the position of the child in the scale, as described above. The position does not relate to the marks but the position in relation to the peers in the class room. For example, if a child's position was below 100 and above 95 per cent, score 5 was given. If a child's position was below 5 per cent, the child gets a score of 1. Higher the score better the educational achievement status.

4. Similarly, the child's position according to parent's estimation was also obtained. Parents of the children were asked to estimate the position of their children on a predetermined five point scale as mentioned above, according to their information about the child's performance. A score was assigned to each child on the basis of the estimated position of the child by the parents.

Note : It is assumed that parents will estimate the position of their children based on their own impression and assessment of child's scholastic achievement, independent to the school records. This may however be not necessarily true, and this is admitted.

Thus each subject in the sample will have two sets of scores —1. based on examination performance in school. 2. based on parent's estimation.

Television Viewing Index

Television viewing index is defined as the ratio of the number of hours per week reported to be viewed by a child, to the total number of hours telecaste per week, and multiplied by hundred. This index ranges from 0—100. Television Viewing

$$\text{ndex (T V I)} = \frac{\text{Total number of viewing hours}}{\text{Total number of telecast hours}} \times 100$$

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Heavy Viewers, Moderate Viewers and Light Viewers

Operationally, children with television viewing index ranging from zero to thirty are considered as light viewers. Children with television viewing index ranging from 30-70 are moderate viewers and children with television viewing index more than 70 are considered as heavy viewers.

4

Method and Procedure

> Television is a total cultural system with its own art, science, stage craft, legendary, geography, demography, character types and action structure.
>
> (*Kunhi Krishnan*, (*1990*)

METHOD

General Plan

The following is a description of the general plan to scientifically evaluate the objectives formulated pertaining to the inter relationships among television viewing behaviour, personal and educational development in children. As a first step, three tools will be developed. Two tools will be used to obtain information regarding children's television-viewing behaviour, from parents and children and also attitudes of both parents and children towards television viewing. The other tool will be used to measure child's internal or external motivational controls (locus of control).

In order to know the television viewing behaviour of children, it is necessary to know what television brings to the child. To examine this one week's television programmes (03.03.1990 to 09.03.1990) will be analysed. Based on the data so obtained, by looking into the reported literature and from personal knowledge obtained from general observation, two omnibus schedules—one for parents and the other from children will be prepared. Locus of control will be measured by using Intellectual Achievement Responsibility (IAR) scale, after necessary modifications to suit local conditions. These tools will be subjected to item analysis and procedures for establishing standard test properties. The sample for this item analysis will be 30 children in the age group of 5-10 years, attending the school.

The next step will be to obtain data on the constructed tools over a sample of 180 children (96 boys, 84 girls) who are having television in their homes and their parents. These children will be selected from two different schools in Tirupati town, by systematic random sampling method. The locus of control of these children will be measured by administering IAR scale. Data on socio-demographic variables, television viewing behaviour and attitudes of parents and children to television viewing will be collected with the help of omnibus schedules.

The data so obtained will be subjected to qualitative and quantitative analysis. It is proposed to use appropriate tests of significance to see association between independent and dependent variables. The study design flow chart explains the variables and the plan of study (see Fig. 1).

Subjects

The sample for the main study consists of 180 children (96 boys and 84 girls) in the age range of 5 to 10 years and their parents, who are having television set in their home These children are selected from two different schools in Tirupati town i.e., 1. Sri Venkateswara University Campus School and 2. Sri Kodanda Rama Swamy English Medium School by using systematic random sampling method.

Tools of Research

The following is a description of tools and measures used in collecting data.

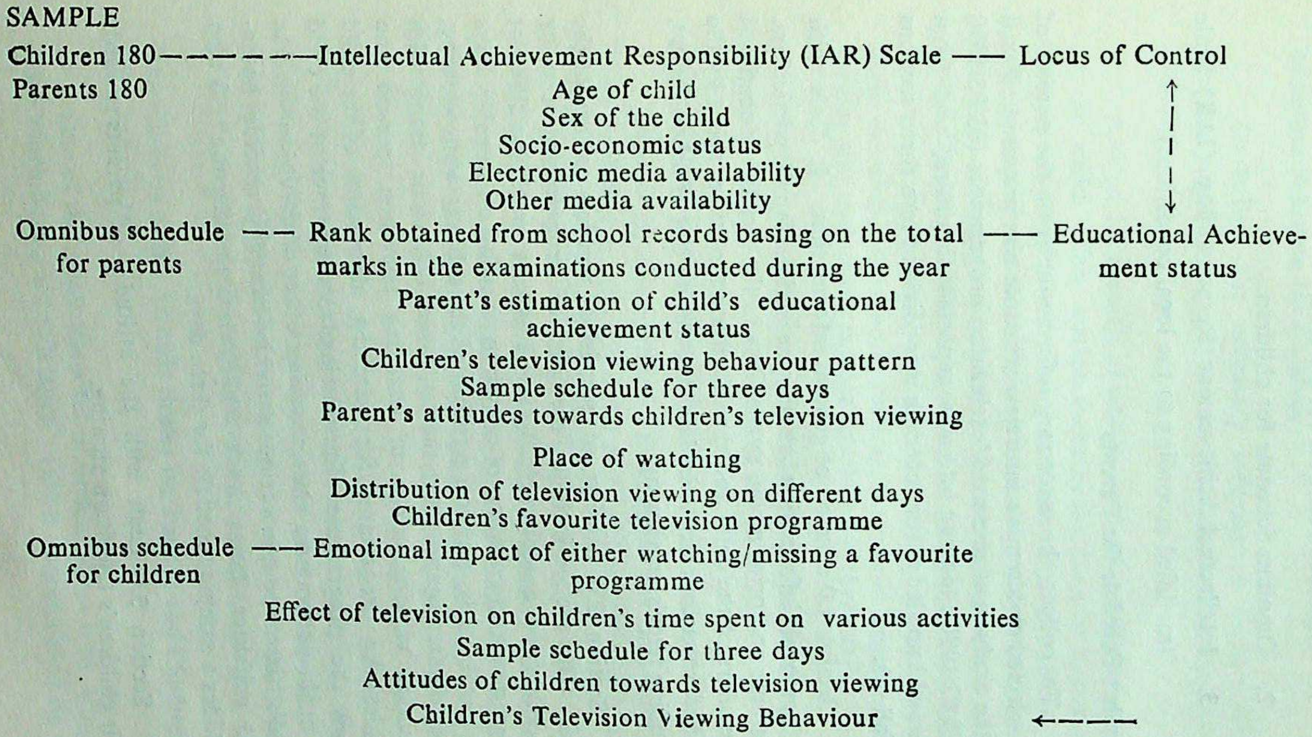

SAMPLE
Children 180
Parents 180
Intellectual Achievement Responsibility (IAR) Scale
Locus of Control
Age of child
Sex of the child
Socio-economic status
Electronic media availability
Other media availability
Omnibus schedule for parents
Rank obtained from school records basing on the total marks in the examinations conducted during the year
Educational Achievement status
Parent's estimation of child's educational achievement status
Children's television viewing behaviour pattern
Sample schedule for three days
Parent's attitudes towards children's television viewing
Place of watching
Distribution of television viewing on different days
Children's favourite television programme
Omnibus schedule for children
Emotional impact of either watching/missing a favourite programme
Effect of television on children's time spent on various activities
Sample schedule for three days
Attitudes of children towards television viewing
Children's Television Viewing Behaviour

Fig. 1. Study Design Flow Chart

1. Omnibus Schedule for parents.
2. Omnibus Schedule for children.
3. Intellectual Achievement Responsibility (IAR) Scale (modified according to the local conditions).

Omnibus Schedule for Parents

To collect the necessary information from the parents of the selected children, an interview schedule was prepared. Based on the analysis of one week's television programmes (03.03.1990 to 09.03.1990), looking into the reported literature, and from personal knowledge the schedule was divided into three sections as follows.

Section 1.0 consists of general information. It deals with the personal information about the child, family particulars, electronic and print media availability in the family, educational particulars of the child and the distribution of time spent by the child for various activities in a day during out of school hours, including television viewing.

Section 2.0 consists of television viewing pattern of the child. This section includes, the type of programmes seen by the child (over a week period), time spent on watching different programmes, distribution of television viewing on regular days and week ends, physical position of the subjects while viewing, approximate distance from the set, other behaviour along with television viewing, mode of watching television, person who decides the programme for watching, discussion of the child about the programme after viewing, remembrance of the child about the programme after watching, effect of television on the child's time spent in various activities like play, reading, household activities, home work and bed time. Section 2.0 also includes a sample schedule for three days.

Section 3.0 dealt with the attitudes of parents towards their children's television viewing.

Omnibus Schedule for Children

To collect the necessary information from children an omnibus schedule was prepared. The schedule comprises of two sections.

Section 1.0 consists of television viewing behaviour pattern of the child. This section includes the place of watching television, number of hours viewed at home and at others house, distribution of television viewing on regular days, week ends and holidays, children's favourite television programme, the emotional impact of either watching a programme or missing a favourite programme, the effect of television on the child's time spent in—play, home work, reading, household activities and this section also includes a sample schedule for three days.

Section 2.0 consists of children's attitudes towards television viewing.

Pilot Study of the Omnibus Schedules for Parents and Children

Pilot study was conducted to examine the suitability of the items included in the schedules and to eliminate which are not suitable and to rearrange if necessary.

In order to test the language comprehension and suitability of items, the tools were checked with language and subject matter experts. Based on their opinions, items were revised and modified.

The tools were administered on a small sample of 30 children selected at random from the selected schools. Parents of these children were also interviewed after establishing necessary rapport. Quantitative screening of items (item analysis) was done to the attitude scales of parents and children.

Item Analysis of the Attitude Scales for Parents and Children

Item Reliability

One of the major purposes of item analysis is to eliminate items which have poor reliability. This is accomplished by computing what is known as homogeniety and consistency of the items. Usually the biserial correlation (the correlation between each item with total score) indicates the homogeniety or consistency of the items. Biserial correlation is usually regarded as the standard procedure in items analysis. A correlation of 0.20 or above is regarded as satisfactory (Garrett, 1981).

In the present study item analysis was performed to parent's and children's attitude scales. For all items in parents' attitude scale, biserial correlation is above 0.3 and is found to be satisfactory. In children's attitude scale, all items have biserial correlation of above 0.6, except one item, which got a low correlation less than 0.70. So the item was discarded.

Item Validity

The item validity is generally determined by computing how well the item descriminates between two extreme groups. Extreme groups were set up on the basis of total score. It is the practice to take the top 27 per cent and bottom 27 per cent. The difficulty index of each item is found by averaging the percents correct in the upper and lower groups. This percentage is approximate, but is accurate enough for most purposes and has the great advantage of easy computation. The descriminative power (validity index) of each item can be read directly from J.C. Flanagan's table of normalized biserial coefficients. The size of the acceptable validity index will depend upon the length of the test, the range of the difficulty indices and the purpose for which the test is designed. As a general rule, items with validity indices of 0.20 are more regarded as satisfactory (Garrett, 1966).

Applying the above procedure to parents and children's attitude scales, the validity of all items, except one in children's attitude scale was deemed to be satisfactory because of the high validity indices. The validity index for all items in parent's attitude scale was above 0.50 and for children's scale it is above 0.30. One item in children's attitude scale which got low validity index was discarded.

Reliability—Split-Half Method

In the split-half method, the test is first divided into two equivalent "halves" and the correlation found for these half-tests. From the reliability of the half-test, the sslf-correlation of the whole test is then estimated. The split half method is regarded by many, as the best of the methods for measuring test reliability.

In the present study split-half reliability (corrected by Spearman-Brown Prophecy formula) for parents attitude scale was 0.93 and for children's attitude scale was 0.83.

Final Form of Omnibus Schedule for Parents

The preliminary schedule administered to parents was found to be satisfactory. So there was no need for modification of the schedule, and the final form of omnibus schedule for parents consists of three sections as in preliminary form, viz., Section 1.0 General information, Section 2.0 television viewing behaviour pattern and Section 3.0 Parent's attitudes towards children's television viewing.

Scoring

The various sections of omnibus schedule for parents were scored as follows :

Section 1.0 : General information

From the general information of the schedule considering the education, occupation and income of the parents, the socio-economic status of the child can be obtained by using Kuppuswamy's (1962) Socio-economic Status Scale (urban). The income aspect of the scale is modified as per the present conditions.

Evaluation of educational achievement status of the child.

The educational achievement status of the child can be assessed from educational particulars of the child, obtained from Section 1.0 of the omnibus schedule as follows.

The following method was developed to assess the educational achievement status of children.

1. The ranks secured by the children were obtained from school records. This was converted into the relative standing with reference to the number of students in the class.

Note : The school system provides for ranking each child on the basis of the total marks obtained in the examinations conducted during the year.

2. The following five point scale was devised to assess the achievement.

Per cent position of the child from top to bottom among its peers		Score
Below 100 and above 95	...	5
Below 95 and above 80	...	4
Below 80 and above 20	...	3
Below 20 and above 5	...	2
Below 5	...	1

Schematic representation of the scale is given below:

Score	1	2	3	4	5
Per cent position of the Child among its peers	5	15	60	15	5

0 5 20 ←——————→ 80 95 100

Level **Bottom** **Middle** **Top**

Fig. Schematic Representatin of the Educational Achievement Status Scale.

3. Each child in the sample is assigned a score by determining the position of the child in the scale as described above. The position does not relate to the marks but the position in relation to the peers in the classroom.

For example : If a child's position was below 100 and above 95 per cent, score 5 will be given. If a child's position was below 5 per cent, the child gets a score of 1. Higher the score better the educational achievement status.

4. Similarly the child's position according to parent's estsmation was also obtained. Parents of the children were asked to estimate the position of their children on a predetermined five point scale as mentioned above, according to their informatioh about the child's performance. A score was assigned to each child on the basis of the estimated position of the child by the parents.

Note : It is assumed that parents will estimate the position of their children based on their own impression and assessment of child's scholastic achievement, independent to the school records. This may however be not necessarily true, and this is admitted.

Thus each subject in the sample will have two sets of scores—1. based on examination performance in school, 2. based on parent's estimation.

The correlation between the education achievement status scores obtained from school records and parental estimation scores was found to be 40.99. This is very high value and indicates that there was agreement between parent's estimation and the children's performance in the school. Because of the high correlation, the average of the two scores—1. children's scholastic performance score, 2. parental estimation score, was used as an index for the educational achievement status of the child.

The sample size for educational achievement status is 120, because educational achievement status of children belong to U.K.G. (second year of pre-school) and first standard was not considered. The reason is that educational achievement status in the present study is based on the ranks which were assigned to the child on the basis of total marks obtained in the examination. So it is not possible to estimate the educational achievement status of a pre school child. Children belong to first standard were also not included, because, these children had little experience with formal education, and their parents were also not able to estimate their children's educational achievement status.

Section 2. Television viewing behaviour pattern

The television viewing time for different programmes and the distribution of viewing time on different days, was obtained by taking the mean time of the total sample. For the rest of questions in section 2, percentages were calculated.

Section 3. Attitudes of parents towarhs children's television viewing :

Parents' attitudes towards children's television viewing were scored basing on five agree favourable opinions and five disagree favourable opinions. A high score of 10 indicates more positive attitude towards television viewing. The final form of parent's attitude towards television viewing (PATV) along with scoring key is given in the section 3 of the omnibus schedule for parents.

Description of Final form of Omnibus Schedule for Children

The preliminary form of the schedule administered is found to be satisfactory. So there is no modification of the schedule and the final form of omnibus schedule for children consists of two sections viz, Section 1 Television viewing behaviour pattern and Section 2 children's attitudes towards television viewing.

SCORING

Section 1. Television viewing behaviour pattern

For analysing the number of hours viewed by the child, mean time was calculated for the total sample. For the rest of the questions, percentages were calculated.

Section 2. Attitudes of children's towards television viewing

Attitudes of children towards television viewing were scored basing on four agree favourable opinions, and five disagree favourable opinions. A high score of 9, indicates more positive attitude towards television viewing.

The final form of children's attitudes towards television viewing (CATV) along with scoring key is given in the section 2.

Intellectual Achievement Responsibility (IAR) Scale

Intellectual Achievement Responsibility Scale is a test of locus of control – devised by Crandall, Katkovsky and Crandall (1965).

The test companies of 34 forced choice items. Each item describes either a positive or negative experience in a school going child's life. Every stem is followed by two statements. One stating that the event was caused by the behaviour of some one else in the child's immediate environment and other statement states that the event was caused by the child.

The IAR scale was translated into Telugu – the regional language, to facilitate the respondents to answer the items in their mother tongue. The opinions of language experts as well as the subject matter expert were procured before the scale was finalized.

Reliability of Intellectual Achievement Responsibility Scale

Test-retest reliability

Crandall, Katkovsky, Crandall (1965), in their standardization of IAR scale found that the consistency of children's IAR scale found that the consistency of children's IAR responses over time is moderately high. Forty seven of the children in grades 3, 4 and 5 were given the test a second time after a 2-month interval. For these younger children, the test-retest correlation found by Crandall et al., (1965) were 0.69 for total

I, 0.66 for I+ and 0.74 for I−. These correlations were all significant at the 0.001 level.

Internal consistency

Because the IAR contains two kinds of items, those sampling beliefs in self-responsibility for positive events and those posing negative events, split half reliabilities were computed separately for the two sub-scales. Thus responses to the eight even-numbered items of the I+ subscale were correlated with the nine odd-numbered items of that subscale, and the nine even-numbered I− items were correlated with the eight, odd-numbered I− items. For a random sample of 130 younger children, the correlation found by Crandall et al., (1965) is 0.54 for I+ and 0 57 for I− after correction with the Spearman-Brow Prophecy formula.

Item analysis for IAR scale was not done in the present investigation, as the instrument was found to be suitable for the purpose of the study. The reliability, validity and suitability of the scale on Indian sample reported by Premalatha Devi Chandra (1989) is found to be satisfactory.

Pilot Study for Intellectual Achievement Responsibility Scale

Pilot study was conducted to examine the suitability of items included in the IAR scale – Telugu version, and to eliminate or rearrange the items which are not suitable.

The scale was administered on a sample of 30 children, belonging to different grades from pre-school to fifth standard.

Final Form of Intellectual Achievement Responsibility Scale

The scale is not suitable for children belonging to pre-school (5+ years) and first standard (6+ years), So, children belong to pre-school and first standard were not included for administering IAR scale in final study. Thus the sample size for measuring locus of control, using IAR scale is 120 only in the final study.

Two items of the pilot form of the IAR scale were not understood by many children from classes – second standard onwards. These two items were modified as approved by subject matter expert's opinion and logical relevance.

Scoring

The scoring key is prepared favouring internal control. Positive event items are indicated by a positive sign and negative events by a negative sign. The internal score is designated by the letter I. Thus the total I score is the sum of his/her I+ and I− sub scores. The child's I+ score is obtained by summing all the events for which he assumes credit and I− scores the total of all the negative events for which he assumes blame. A high I total score of IAR scale (22 and above) indicates that the child has high internal control. Medium score (i.e. 17-22) indicates that the child has low internal control and a low score (i.e. below 17) indicates that the child has external control.

PROCEDURE

The investigator personally visited the two schools selected for the study i.e., Sri Venkateswara University Campus School, and Sri Kodanda Ramaswamy English Medium School, located at Tirupati town. The two schools were mainly selected because these schools are run by S.V. University and Tirumala Tirupati Devasthanam (TTD) respectively, where children belonging to University employees and T.T.D. employees, belonging to different socio-economic status are available.

From each class in the schools, children having television set in their homes were identified and were written alphabetically, and 180 children (90 children from each school) were selected for the study, using systematic random sampling method.

Systematic random sampling is a variation of simple random sampling. It requires the population i.e., a list of its members, be ordered in such a way that each element of the population can be uniquely identified by the other. For example the residents of a community may be listed and their names arranged alphabetically. Each of these names may be given a unique number. Such an index is known as the frame of the population. Suppose this frame consists of 1,000 members each with a unique number, i.e., from 1 to 1,000. Let us say, we want to select a sample of 100. We can start by selecting any number between 1 and 10 (both includes). Suppose we make a random selection and get 7. We then proposed to select members starting from 7. With regular interval of 10. The selected sample consists of elements bearing numbers 7, 17, 27, 37, 47 ... 977, 987, 997. This sample is a systematic sample (Wilkinson and Bhandarkar, 1982).

By using systematic random sampling method, 180 children were selected i.e., 90 children from each school. Among 90 children in each school, 48 are boys and 42 are girls. Thus the total sample consists of 96 boys and 84 girls.

Each child was interviewed personally using omnibus schedule for children after establishing necessary rapport, and was administered with the IAR scale, (except pre-school and first standard children). Later, house addresses of children were taken from the school records and the investigator personally visited the children's homes and established a good report with parents, mostly mothers, and then interviewed them by using omnibus schedule for parents. The reason for selecting mothers is that they are the only persons who spend maximum time with the child and know more about the children's television viewing behaviour. Thus the data was collected from 180 children (96 boys and 84 girls) and 180 parents about the television viewing behaviour of children, and also the attitudes of parents and children towards television viewing.

Analysis of Data

Descriptive statistics on each of the parameters are given. The data are tabulated to highlight the important findings. Appropriate test of significance are applied to see association between independent and dependent variables.

In the next chapter, the results of the analysis are presented systematically.

5

Results

Television – The word is half Latin and half Greek.
No. good can come of it.

—C.P. Scott
Manchester Guardian

Scheme of Data Analysis

The data collected according to the method described in the previous chapter was subjected to statistical analysis. The nature of the analysis was determined from the point of view of the objectives formulated. The following computations were done keeping in view (a) the general assumptions under lying, the study, and (b) the nature of data obtained.

1. Tabulation of data to high light the differences between different groups i.e., boys and girls, upper, middle and lower socio-economic groups and also between children with different loci of control.
2. Application of appropriate test of significance to see association between sex, locus of control, educational achievement status, socio-economic status and children's television-viewing behaviour.

In addition to the above, the data are also tabulated to study the distribution of viewing time by children, and also attitudes of parents and children towards television-viewing.

Sample Characteristics

As a first step the socio demographic profile of the sample of subjects was tabulated.

Table 1

Socio demographic Profile of the Sample

Variables		*Subjects*	
		Boys (n=96)	*Girls (n=84)*
1. *Age* (years)			
Mean		8.1	7.5
Range		(5-10)	(5-10)
2. *Sex*			
Frequency		96	84
Percentage		53.3	46.7
3. *Socio-Economic Status*			
Mean Score		18.5	19.8
Lower (n=29)	Frequency	18	11
	Percentage	18.8	13.1
Middle (n=61)	Frequency	32	29
	Percentage	33.3	34.5
Upper (n=90)	Frequency	46	44
	Percentage	47.9	52.4
4. *Family size*			
Mean		4.9	5.1
Range		(3—7)	(3−7)
5 *Locus of control* (n=120)*			
Subjects		64	56
Mean IAR (I) score		19,8	19.8
Range		(11—29)	(12—25)

*60 children belonging to U.K.G. and First Class are not included.

Table 1 (see p.79) shows the socio-demographic distribution of the sample. The study sample consists of 180 school going children between 5-10 years in Tirupati town and their parents. Among 180 children 53.3 percent are boys and 46,7 percent are girls. The mean age for boys is 8.1 years and 7.5 years for girls.

The mean socio-economic status scale score is 18.5 for boys and 19.5 for girls, are per Kuppuswamy's socio-economic status scale (urban), after necessary modification of the income aspect of the scale. This shows that the majority of the subjects belong to upper middle class. As per the sample distribution, the investigator has merged the first two categories in Kuppuswamy's socio-economic status scale i.e., upper and upper middle and the last two categories i.e., upper lower and lower, thus making three point scale which consists of upper (score 16-29), middle (score 11-15) and lower (score 5.10), classes. Majority of the subjects in the sample, i.e., 47.9 percent of boys and 52.4 percent of girls belong to upper class, 33.3 percent of boys and 34.5 percent of girls belong to middle class and 18.8 percent of boys and 13.1 percent of girls belong to lower class.

The mean family size is 4.9 for boys and 5.1 for girls with a range of 3.7. The mean IAR (I) score is 19.8 for both boys and girls. This shows that majority of the sample have low internal loeus of control (score 17.22). Thus there seems to be no significant difference between boys and girls in family size, and locus of control.

Educational achievement status of the child – Ranking Vs. Parental estimation

The following procedure was employed to measure the educational achievement status of the children.

The educational achievement status of the children was obtained by taking the ranks secured by the children from school records. These ranks were converted into the relative standing with reference to the number of students in the class.

Note : The school system provides for ranking each child, on the basis of the total marks obtained in the examinations conducted during the year.

The following five point scale was devised to assess the educational achievement status.

Percent position of the child from top to bottom among the peers	Score
Below 100 and above 95	5
Below 95 and above 80	4
Below 80 and above 20	3
Below 20 and above 5	2
Below 5	1

Schematic representation of scale is given below :

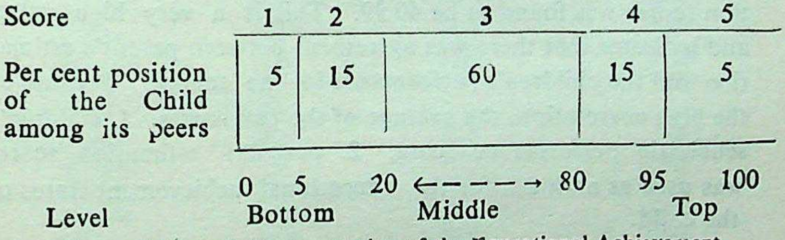


Fig. Schematic Representation of the Equcational Achievement Status Scale

Each child in the sample was assigned a score by determining the position of child in the scale, as described above. The position does not relate to the marks but the position in relation to the peers in the classroom.

For example : If a child's position was below 100 and above 95, a score of 5 was given. If a child's position was below 5 percent, the child gets a score of 1. Higher the score better the educational achievement status.

Similarly the child's position according to parent's estimations was also obtained. Parents of the children were asked to estimate the position of their children on a predetermined five point scale as mentioned above, according to their information about the child's performance. A score was assigned to each child on the basis of the estimated position of the child by the parents.

Note : It is assumed that parents will estimate the position of their children based on their own impression and assessment of child's scholastic achievement, independent to their school records. This may however be not necessarily true, and this is admitted.

Thus each subject in the sample will have two sets of scores – 1. based on examination performance in school, 2. based on parent's estimation.

The correlation between the educational achievement status scores obtained from school records and parental estimation scores was found to be 40.99. This is a very high value and indicates that there was agreement between parent's estimation and the children's performance in the school. Because of the high correlation, the average of the two scores – 1. children's scholastic performance score, 2. parental estimation score, was used as an index for the educational achievement status of the child.

For tabulation convenience purpose, children were divided into three categories based on their educational achievement status scores as follows.

1. Children with scores 5 and 4 were considered as having high educational achievement status.
2. Children with score 3 were considered as having moderate educational achievement status, and
3. Children with scores 2 and 1 were considered as having poor educational achievement status.

Table 2 shows the distribution of subjects across the levels of locus of control, according to sex, social class and educational achievement status.

Table 2

Distribution of percent of subjects (frequencies in parenthesis) in relation to locus of control, according to sex, social class and educational achievement status

	Locus of control (I.A.R. (1) levels) (n=120		
	External control (n=30) (score below 17)	*Low Internal Control (n=44) (score 17—22)*	*High Internal Control (n=46) (score 22 and above)*
1. *Sex*			
Boys	25	32.8	42.2
(n=64)	(16)	(21)	(27)
Girls	25	41.1	33.9
(n=56)	(14)	(23)	(19)
2. *Socio-Economic Status*			
Lower	38.1	33.3	28.6
(n=21)	(8)	(7)	(6)
Middle	26.1	39.1	34.8
(n=46)	(12)	(18)	(16)
Upper	18.7	35.8	45.3
(n=53)	(10)	(19)	(24)
3. *Educational Achievement Status*			
High	17.2	29.7	53.1
(n=64)	(11)	(19)	(34)
Moderate	28	48	24
(n=25)	(7)	(12)	(6)
Poor	38.7	41.9	19.4
(n=31)	(12)	(13)	(6)

X^2 for sex and locus of control=1.11 for 2 df. Not significant.

X^2 for socio-economic status and locus of control=3.85 for 4 df, $P<0.50$.

X^2 for educational achievement status and locus of control=14.6 for 4 df. $P<0.01$.

The sample size for measuring locus of control using IAR (1) scale is 120, because the scale is not administered to children belonging to U.K.G. (second year of pre-school) and first standard, due to their incapacity to understand the scale.

From Table 2 it is clear that one fourth of the subjects (i.e. 25 percent boys and 25 percent girls) are having external locus of control and three-fourths are having internal locus of control. There is no association between sex and the locus of control. The corresponding X^2 statistic is found to be not significant.

Among lower socio-economic group majority (38.1 percent) are having external locus of control. Among middle socio-economic group majority of the subjects (39.1 percent) are having low internal locus of control and among upper socio-economic group most of the subjects (45.3 percent) are having high internal locus of control. The corresponding X^2 statistic is not significant at 0.05 level. It is significant at 0.50 level.

Majority of the sample lie in high educational achievement status. Among them majority of subjects falling in high educational achievement status (53.1 percent) are having high internal locus of control. The X^2 statistic is significant at 0.01 level. It shows that there is significant association between locus of control and educational achievement status of the children. Fig. 2 clearly shows the graphic representation of the educational achievement status of the children across the levels of locus of control.

Table 3 shows the distribution of subjects across the levels of educational achievement status according to sex and social class. The sample size for educational achievement status is 120, because educational achievement status of children belonging to U.K.G. (second year of pre-school) and first standard was not considered. The reason is that educational achievement status in the present study is based on the ranks given on the basis of total marks obtained in the examinations conducted during the year. So it is not possible to estimate the educational achievement status of pre-school children (U.K.G). Children belonging to first standard were also not included because they had little experience with formal education and parents were also not able to estimate their children's educational achievement status.

Table 3

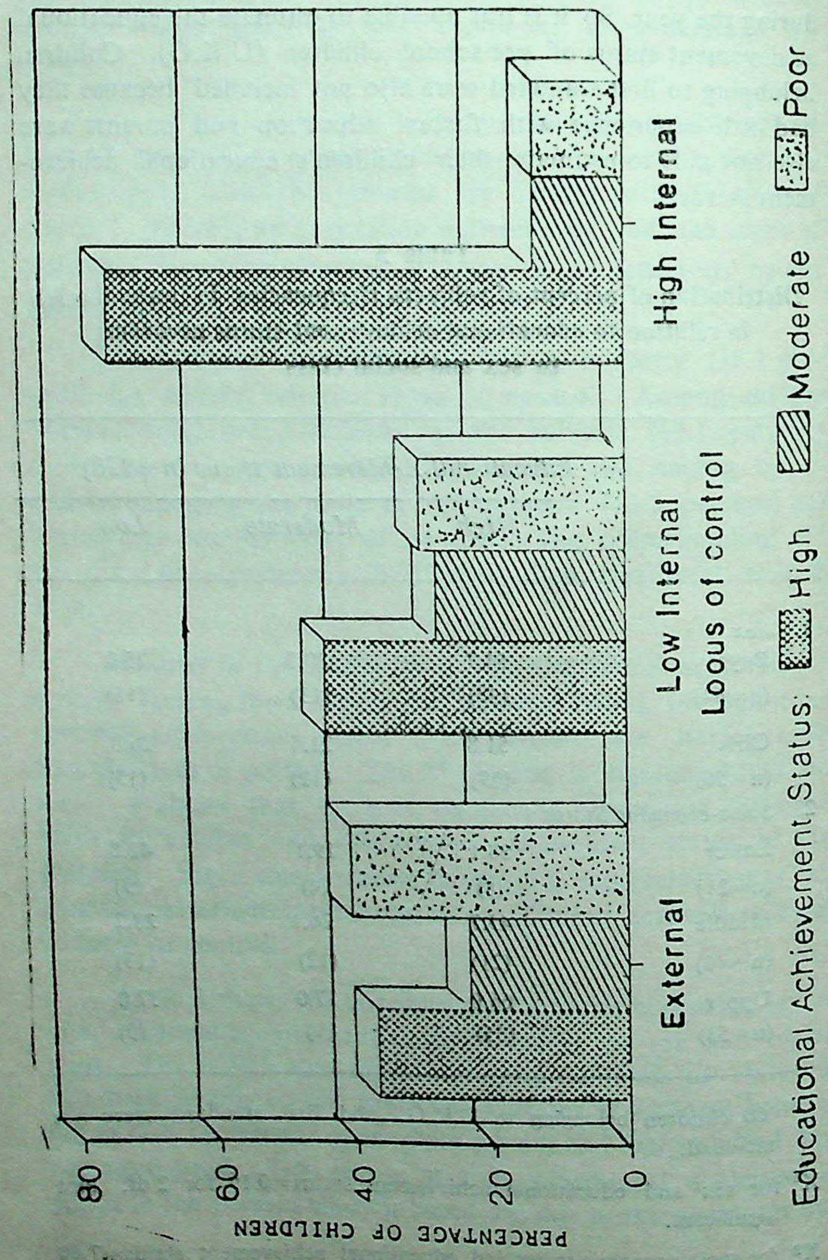
Distribution of percent of subjects (frequencies in parenthesis) in relation to educational achievement status according to sex and social class

	*Educational Achievement status (n=120)**		
	High	*Moderate*	*Low*
1. *Sex*			
Boys	54.7	20.3	25.0
(n=64)	(35)	(13)	(16)
Girls	51.8	21.4	26.8
(n=56)	(29)	(12)	(15)
2. *Socio-economic Status*			
Lower	38.1	19.1	42.8
(n=21)	(8)	(4)	(9)
Middle	45.7	26.1	28.2
(n=46)	(21)	(12)	(13)
Upper	66.0	17.0	17.0
(n=53)	(35)	(9)	(9)

*60 children belonging to U.K.G. and first standard were not included.

X^2 for sex and educational achievement status=0.16 for 2 df. Not significant.

X^2 for socio-economic status and educational achievement status=7.68 for 4 df. $P<0.10$.



dig. 2 Percent of Children Reaching Different Levels of Educational Achievement Status in Relation to Locus of Control (1-B).

From Table 3 it is clear that half of the subjects in the sample, both boys and girls are in high educational achievement status. There is no association between sex and educational achievement status. The corresponding X^2 statistic is found to be not significant.

Most of the subjects belonging to upper socio-economic status (66 percent) got high educational achievement status. From the table, it is clear that higher the socio-economic status, better the educational achievement status. The corresponding X^2 statistic is found to be significant at 0.10 level.

Analysis of Media Availability Distribution

Table 4 shows that majority of children belonging to upper socio-economic status (63.3 percent) are having colour (51 cms.) television sets, majority of middle economic status children are having black and white (51 cms.) television and most of children belonging to lower economic group (62.1 percent) are having portable black and white (36 cms.) television sets in their homes.

Table 4

Type of television present and socio-economic status

Socio-economic Status	*Type of television*		
	Colour (51 cms)	*Black and White (51 cms)*	*Portable (Black and White) (36 cms)*
Lower	10.3*	27.6	62.1
(n=29)	(3)	(8)	(18)
Middle	9.8	49.1	41.0
(n=61)	(6)	(30)	(25)
Upper	63.3	25.6	11.1
(n=90)	(57)	(23)	(10)

* *Note* : Top figures refer to percentages. Bottom values in parenthesis refer to frequencies.

From Table 5, it is clear that there is association between socio-economic status and television purchased time. As the socio-economic status increases, the television purchased time is also increasing. Most of the lower and middle economic status groups have bought television sets one year or two years back. Majority of upper economic group (i.e., 52.2 percent) bought the television sets three years back and above.

Table 5

Socio-economic status and television purchased time

Socio-economic status	*Television purchased time*		
	One year back	*Two years back*	*Three years and above*
Lower	48.3*	34.5	17.2
(n=29)	(14)	(10)	(5)
Middle	27.9	41.0	31.1
(n=61)	(17)	(25)	(19)
Upper	24.4	23.3	52.2
(n=90)	(22)	(21)	(47)

**Note* : Top figures refer to percentages and bottom values in parenthesis refer to frequencies.

Table 6 shows that in addition to television, other electronic and print media viz., radio, tape recorder, VCR, VCP, newspaper and magazines are present in majority of homes belonging to upper socio-economic group when compared to middle and lower socio-economic groups. 86.7 per cent of upper socio-economic group are having radio, where as only half of the middle socio-economic group (52.5 per cent) and one-fourth of lower socio economic group (27.6 per cent) are having radio. VCR and VCP are present in homes belonging to only upper socio-economic group. Thus from table 6 it is clear that higher the socio-economic status, more the availability of media.

Table 6

Distribution of subjects according to socio-economic status regarding the availability of other media (electronic & print) in addition to television

Socio-economic status	*Electronic Media*				*Print Media*
	Radio	*Tape Recorder*	*VCR*	*VCP*	*Newspapers and Magazines*
Lower	27.6	17.2	—	—	10.3
(n--29)	(8)	(5)			(3)
Middle	52.5	16.4	—	—	8.2
(n—61)	(32)	(10)			(5)
Upper	86.7	70.0	4.4	1.1	44.4
(n—90)	(78)	(63)	(4)	(1)	(40)

**Note* : Top figures refer to percentages. Bottom values in parenthesis refer to frequencies.

Table 7 shows that among 48 children whose families are having print media, majority (63 per cent) of them are having high internal locus of control. Print media viz., newspapers and magazines are available in very few per cent (6.6 per cent) of children having external locus of control.

Analysis of Time Distribution for Various Activities in a Day

In order to know the distribution of time spent for various activities in a day by the children, mean time spent on various activities in a day was calculated. It was found that the mean time of getting up from bed by the children is 6.30 a.m. Mean time of going to school is 8.50 a.m. and mean time of returning from school is found to be 4.25 p.m. Table 8 shows the mean time (minutes) spent for various activities, during out of school time in a day across the levels of sex, social class and locus of control.

Table 7

Distribution of per cent of subjects (frequencies in parenthesis) according the use of print media in relation to locus of control

Locus of control (IAR(I) levels)	*Print media (n—48)** *Newspapers and Magazines*
External control	6.6
(Score below 17)	(2)
Low internal control	38.6
(Score 17—22)	(17)
High internal control	63.0
(Score 22 and above)	(29)

*Number of children having print media in their homes.

Table 8 shows that both boys and girls are spending large amount of time (i.e. 83 minutes for boys and 74 minutes for girls) on watching television. The other activities which cover most of our school time next to television watching, are play, doing home work and tuition.

Children belonging to middle and lower socio-economic group are spending most of their out of school time on watching television. On the other hand, children from upper socio-economic group are spending most of their out of school time on play.

Children with external locus of control as well as internal locus of control are spending most of their out of school time on watching television. Children with high internal locus of control are spending less time on watching television when compared to children with low internal locus of control and external locus of control. From the table 8, it is clear that children with internal control are spending more time on

Table 8

Mean time (Minutes) spent on various activities in a day (out of school time) in relation to sex, social class and locus of control

	Type of activity (Mean time spent in minutes)						
	Doing home work	*Reading*	*Writing*	*Play*	*Helping in the house-hold work*	*Watching Television*	*Any other (Tuition)*
1. *Sex*							
Boys (n=96)	40.3	17.9	7.4	61.0	12.0	83.4	38.0
Girls (n=84)	42.9	13.1	2.8	63.5	7.5	74.0	33.0
2. *Socio-economic status*							
Lower (n=29)	26.0	13.4	4.1	48.6	2.6	72.6	30.3
Middle (n–61)	38.5	8.5	3.3	48.9	5.0	81.7	51.6
Upper (n=90)	49.0	22.3	6.0	78.6	1 2	67.1	68.2
3. *Locus of control*							
External control (Score below 17) (n=30)	36.0	9.0	3.7	49.0	5.0	77.0	58.0
Low internal control (Score 17–22) (n=44)	41.0	30.5	2.1	51.6	7.5	101.5	59.1
High internal control (Score 22 and above) (n=46)	48.0	20.2	5.2	47.7	3.9	76.3	37.8

home work and reading than children with external locus of control.

Analysis of Television Viewing Behaviour Pattern (as Reported by Parents)

Television viewing behaviour was categorised under the following important behavioural aspects-1. types of programme watched, 2. number of hours spent for watching, 3. distribution of television viewing on regular days and weekends, 4. physical positition while watching, 5. distance of watching, 6. distance of watching, 6. other behaviour along with television viewing, 7. mode of watching, 8. control over choice of programmes, for watching and 9. the emotional impact of either watching a programme or missing a favourite programme.

In order to know the amount and type of television programmes viewed by the chield, it is necessary to know the type of programmes telecast through television and number of hours allotted for each programme per week. To examine this, it is necessary to analysis one week's television programmes (03.03.1990 to 09.03.1990). Based on the data so obtained, various programmes were identified into categories as follows. a) Education programmes. b) Entertainment programmes which includes serials, plays, feature films, film songs, music and dance programmes, c) Sports, d) Children's programmes, e) Programmes for youth and women, f) Advertisements, g) News, h) Discussions, interview, quiz etc., i) Health programmes, exercises and j) Details of weekly programmes (Sapthahika) and letters. The total number of telecast hours of the above mentiond programmes per week, was calculated. The total programmes were seperated as network programmes and regional programmes. Type of programmes televised and number of hours alloted for each programme per week were listed out in section 2.0 of the omnibus schedule designed for parents.

The information obtained from the section 2.0 of the omnibus schedule for parents was analysed as follows. Mean number of viewing hours per week of all programmes by children were calculated and presented in table 9.

Table 9

Mean viewing time (hours) per week of the total programmes by the children

	Mean viewing time (hours) per week
1. *Sex*	
Boys (n—96)	11.08
Girls (n- 81)	11.52
2. *So io-Economic status*	
Lower (n—29)	12.2
Middle (n—61)	10.13
Upper (n—90)	10.7
3. *Locus of control*	
External control (n—13)	11.75
Low internal control (n—44)	10.58
High internal control (n—46)	9.33

Table 9 shows that on an average, girls are watching television for more time than boys. Children belonging to lower socio-economic group are watching television for more time than upper and middle socio-economic groups. Much difference in mean viewing time was not seen between middle and upper socio-economic group children. There seems to be significant difference between external and internal locus of control groups in their average number of viewing hours per week. Children belong to external locus of control group are watching television for more time than children belong to internal locus of control group. Among the internal locus of control groups. also, children with high internal locus of control are watching television for less time than children who are having low internal locus of control.

The data was furthur treated as an index based on the total number of viewing hours and total number of telecast hours. Thus the television viewing index is the ratio of total number of hou.s viewee per week to total number of hours telecast per week multiplied by hundred. The television viewing index ranges from 0–100.

$$\text{Television viewing index (TVI)} = \frac{\text{Totalno. of viewing hours}}{\text{Total no. of telecast hours}} \times 100$$

Based on the television viewing index children were classified as heavy viewers, moderate viewerst and light viewers. Children with viewing index from zero to thirty were considered as light viewers, children with viewing index from thirty to seventy were considered as moderate viewers and children with viewing index more than seventy were considered as heavy viwers.

This study shows the viewing index of subjects across the levels of sex, socio-economic status, locus of control and educational achievement status. Study clearly shows that 95 per cent of sample are light viewers (TVI=0-30) and 5 per cent are moderate viewers (TVI=30-70) and there are no heavy viewers (TVI=70-100) in the sample.

Girls seem to have more viewing index than boys. Lower socio-economic status group has more viewing index than middle and upper socio-economic groups. Children having external locus of control have more viewing index than children those who have internal locus of control and children with poor educational achievement status have more viewing index than high and moderate educational achievement status groups.

Table 10 shows the association between type of viewers and independent variables *viz.*, sex, socio-economic status, locus of control and educational achievement status.

There seems to be no association between sex and type of viewers. The corresponding X^2 statistic is not significant. Socio-economic status and type of viewers are highly associated

Table 10

Type of Viewers in Percentages (Frequencies in Parenthesis), Socio-economic Status, Locus of Control and Educational Achievement Status

	*Type of viewers**	
	Moderate viewers	*Light viewers*
1. *Sex*		
Boys (n=96)	5.2 (5)	94.8 (91)
Girls (n=84)	7.1 (6)	92.8 (78)
$X^2=0.22$ df=1, Not significant		
2. *Socio-economic Status*		
Lower (n=29)	24.1 (7)	75.9 (22)
Middle (n=61)	4.9 (3)	95.1 (58)
Upper (n—90)	1.1 (1)	98.9 (89)
$X^2=16.22$, df=2, $P<0.01$		
3. *Locus of Control*		
External Control (n=30)	20.0 (6)	80.0 (24)
Low Internal Control (n=44)	9.0 (4)	91.0 (40)
$X^2=7.141$, df=1 $P<0.05$		
4. *Eaucational Achievement Status*		
High (n=64)	1.6 (1)	98.4 (63)
Moderate (n=25)	16.0 (4)	84.0 (21)
Poor (n=31)	16.1 (5)	83.9 (26)
$X^2=5.55$, df=2 $P<0.10$		

* There were no heavy viewers in the same.

wth each other. The corresponding X^2 statistic is significant at 0.01 level. Locus of control and type of viewers are also seem to be significantly associated. The corresponding X^2 statistic is significant at 0.05 level. The X^2 statistic for educational achievement status and type of viewers is significant at 0.10 level but not at 0.05 level of significance.

Annexures G, H, I and J shows the network and regional wise distribution of various programmes *viz.*, educational entertainment, news, sports and advertisements across the levels of sex, socio-economic status, locus of control and viewing index.

Table 11 shows the number of hours spent for watching various programmes (both net work and regional) per week across the levels of sex, socio-economic status, locus of control and educational achivement status.

From table 11, it is clear that on an average per week, girls are watching educational, enteraiment programmes and advertisement for more time than boys. Boys are watching news and sports programmes, for more time than girls. A bar diagram showing the relative distribution of time spent for watching various programmes by boys and girls can be seen in Fig. 3.

When socio-economic status in considered, children from lower socio-economic status are watching more entertainment programmes and advertisements. Children from middle economic group are watching more educational programmes, sports programmes and news than upper and lower economic groups. Children from upper economic group are watching adevertisements same as middle and lower groups, but are watching other programmes less time than the other two groups *i.e.*, middle and lower economic groups. Fig. 4, shows the distribution of time spent for watching various programmes by children belonging to different socio-economic status in bar diagram.

Table 11

Mean Number of Hours Spent by Children on Watching Different Programmes Per Week (Both Network and Regional) in Relation to Sex, Socio-Economic Status, Locus of Control and Educational Achievement Status

	Type of Programmes Viewed (Hours Per Week				
	Educational	*Entertainment*	*News*	*Sports*	*Advertisements*
1. *Sex*					
Boys (n=96)	6.42	7.9	0.72	0.48	1.56
Girls (n=84)	0.49	8.6	0.56	0.33	1.58
2. *Socio-economic Status*					
Lower (n=29)	0.32	10.03	—	0.26	1.59
Middle (n=61)	0.56	6.79	0.71	0.50	1.57
Upper (n=90)	0.47	8.66	0.60	0.46	1.57
3. *Locus of Control*					
External Control (n=30)	0.25	9.62	–	0.29	1.59
Low Internal Control (n=44)	0.54	7.33	0.66	0.48	1.44
High Internal Control (n=46)	0.59	6.08	0.62	0.47	1.57
4. *Educational Achievement Status*					
High (n=64)	0.59	5.81	0.79	0.51	1.57
Moderate (n=25)	0.55	6.89	0.71	0.39	1.57
Poor (n=31)	0.21	10.52	—	0.30	1.58

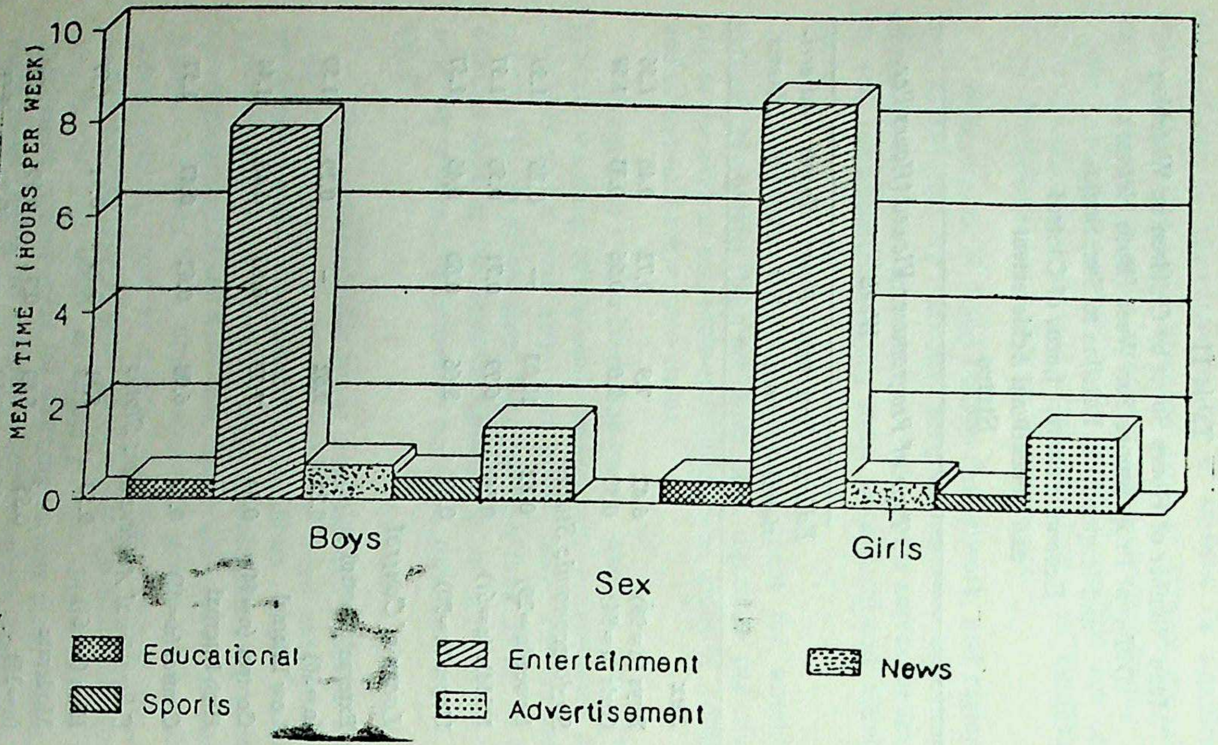


Fig. 3. Mean Time (Hours per week) spent by children on watching Different Programmes between boys and girls.

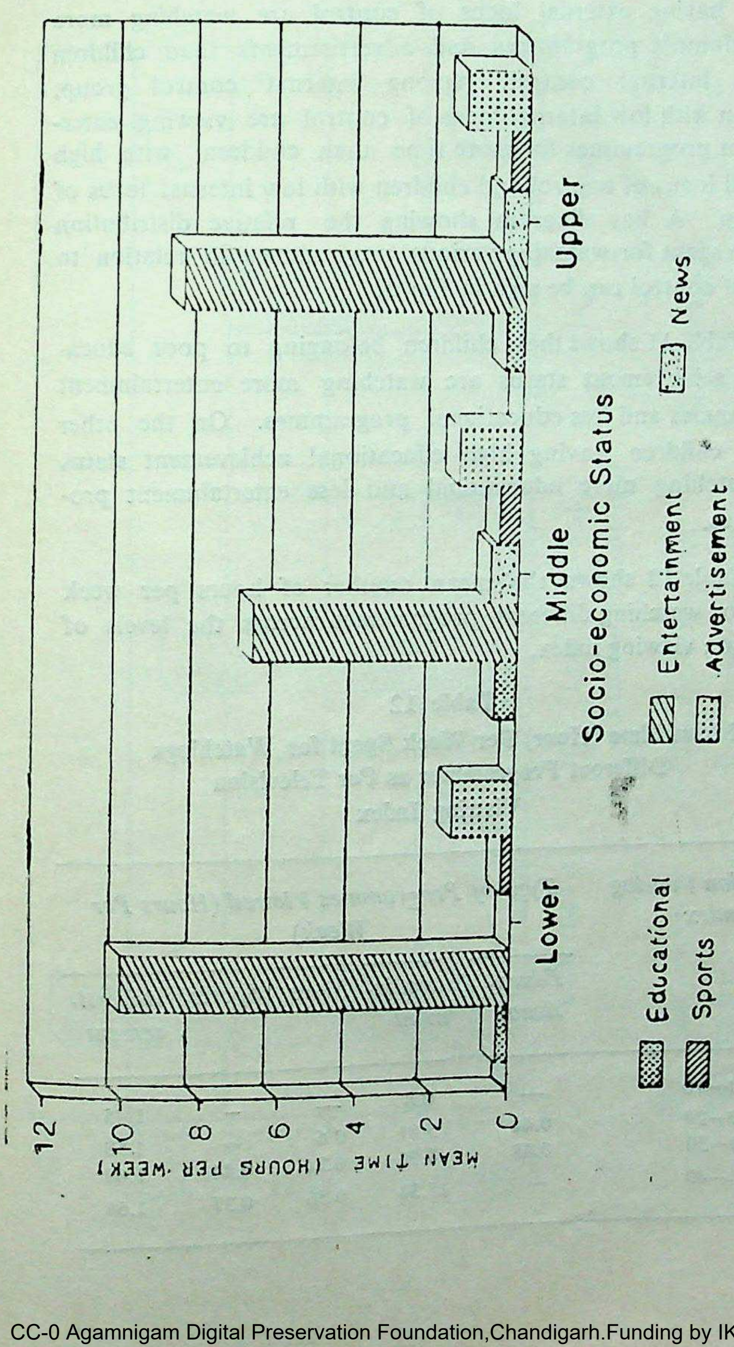


Fig. 4. Mean time (Hours per week) spent by Children on Watching Different Programmes across the levels of socio-economic status.

Regarding the locus of control, children who are identified as having external locus of control are watching more entertainment programmes and advertisements than children having internal control. Among internal control group, children with low internal locus of control are viewing enterainment programmes for more time than children with high internal locus of control and children with low internal locus of children. A bar diagram showing the relative distribution of time spent for watching various programmes in relation to locus of control can be seen in Fig. 5.

Table 11 shows that children belonging to poor educational aehievement status are watching more entertainment programmes and less educational programmes. On the other hand, children having high educational achievement status are watching more educational and less entertainment programmes.

Table 12 shows the mean number of hours per week spent for watching different progrommes across the levels of television viewing index.

Table 12

Mean Time (Hour) Per Week Spent for Watchings Different Programmes as Per Television Viewing Index

Television Viewing Index	*Type of Programmes Viewed (Hours Per Week)*				
	Educational	*Entertainment*	*News*	*Sports*	*Advertisement*
0—10	—	0.8	—	—	1.45
10—20	0.44	5.81	0.6	—	1.58
20—30	0.48	8.26	0.74	0.44	1.60
30—40	—	15.34	0.56	0.37	1.66

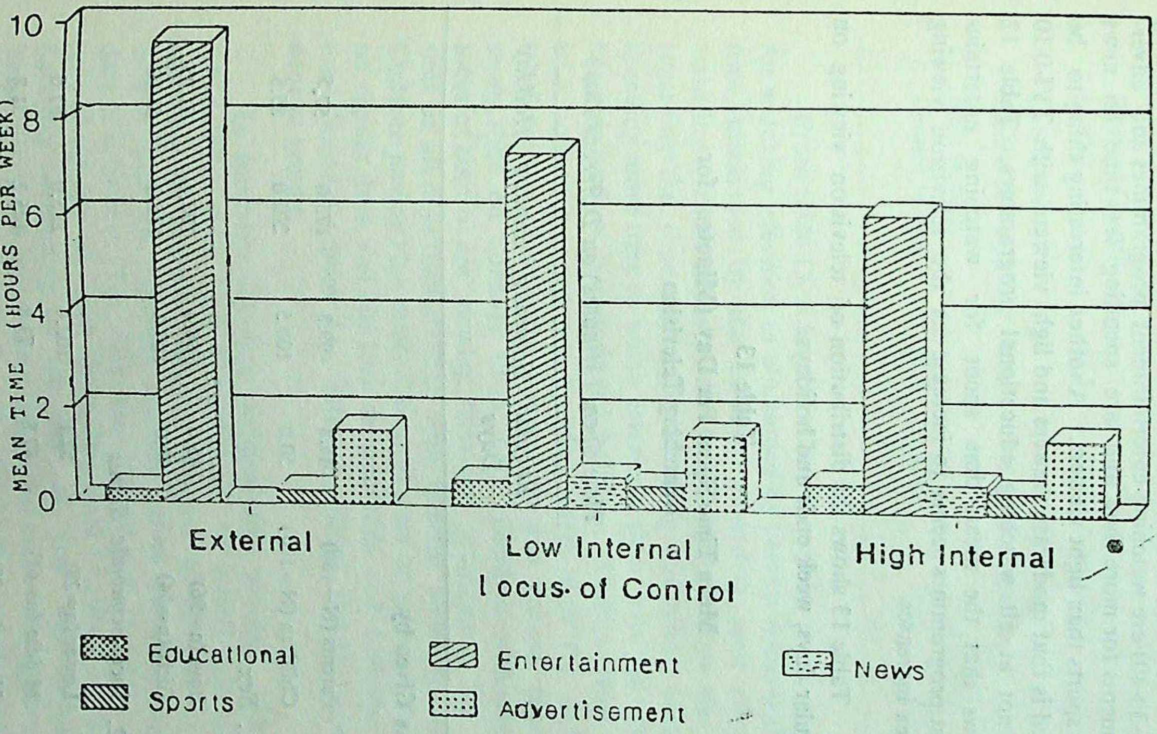


Fig. 5. Mean Time (Hours per week) spent by children on watching Different programmes Across subjects in relation to locus of control (I—E).

From table 12, it is clear that moderate viewers (*i.e.*, TVI-30-40) are watching entertainment programmes and advertisements for more time and are spending less time on news and sports than light viewers. Another interesting thing to be noted is that moderate viewers and light viewers with TVI-0-10 are not at all watching educational programmes. Table 12 shows that the mean time spent for watching entertainment programmes seems to increase as the television viewing index increases.

Table 13 shows the distribution of television viewing on regular days, week ends and holidays.

Table 13

Mean Time Spent Per Day (Minutes) for Watching Television

	Time Spent (Minutes) on Different Days			
	Regular Days	*Saturday*	*Sunday*	*Holiday*
As Given by				
Parents (N—180)	48.8	99.3	175.0	57.5
Children (N=180)	50.0	100.5	201.0	85.5
1. ***Sex***				
Boys (n=96)	45.6	94.4	173.4	51.25
Girls (n=84)	50.0	105.0	175.0	58.20
2. ***Socio-economic Status***				
Lower (n=29)	52.1	102.4	225.0	57.6
Middle (n=61)	47.8	73.8	125.2	51.8
Upper (n=90)	50.7	93.3	174.0	55.3

Cond.

3. *Locus of Control*				
External Control (n=30)	53.2	124.0	156.0	60.0
Low Internal Control (n=44)	44.0	113.2	145.9	56.6
High Internal Control (n=46)	53.5	113.1	135.0	52.3

From table 13, it is clear that the mean time per day for watching television as mentioned by parents is less than the time mentioned by the children, regarding their television watching. There seems a difference between boys and girls regarding the time spent for watching television. Girls are spending more time to watch television than boys on all day *i.e.*, regular days, weekends and holidays. Children from lower socio-economic group are spending more time for watching television than middle and upper economic groups, especially more time on Sundays (3.75 hrs). Children with external locus of control are viewing television programmes for more time on all days than children with internal locus of control. Children having high internal control seem to spend more time on regular days, and less time on weekends and holidays than the other two groups *i.e.*, external control and low internal control groups.

In interview schedule designed for parents, a sample schedule for three days was included, to collect information regarding the television viewing duration of children on the date of interview, yesterday and day before yesterday, to the date of interview. The data was analysed such that the mean time of viewing on each day of the week *i.e.*, from Sunday to Saturday depending on the day of visit was calculated. Thus the mean time spent (minutes) on watching television through out the week days was calculated and tabulated in **Table 14.**

Table 14

Distribution of Mean Time Spent (Minutes) by Children on Watching Television During a Week

	Mean Time Spent (Minutes) for Television on Different Days						
	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*	*Sunday*
1. *Sex*							
Boys (n=96)	37.4	38.2	60.9	43.3	64.3	103.0	177.1
Girls (n=84)	39.5	41.3	65.1	44.5	65.2	104.5	185.8
2. *Socio-economic Status*							
Lower (n=29)	40.5	43.1	65.2	47.7	68.7	110.5	212.1
Middle (n=61)	35.0	36.7	60.0	43.4	63.0	94.8	120.0
Upper (n=90)	37.4	39.3	63.3	43.3	64.3	102.3	170.0
3. *Locus of Control*							
External Control (n=30)	39.8	42.2	65.2	49.9	67.8	113.5	163.3
Low Internal Control (n=44)	37.1	29.1	63.1	45.8	64.2	87.0	148.2
High Internal Control (n=46)	40.2	40.3	60.2	42.5	62.6	112.3	134.5

Table 14 shows that viewing time is maximum on Sundays during which regional feature film broadcasts, irrespective of of sex, socio-economic status and locus of control of children. From the table, it is clear that girls seem to spend more time than boys on watching television, on all days of the week. Children belonging to lower socio-economic group are watching television for more time than children belonging to upper and middle socio-economic groups. This trend is clearly seen on week ends. Viewing time of children is more on wednesday, friday, saturday and sunday during which film based songs and feature film broacast. It is interesting to note that viewing time in these days is comparatively less for children who have high internal locus of control than children who have low internal and external locus of control.

Table 15 shows the calculated X^2 values for the independent and dependent variables (percentages and frequencies)

Table 15 shows the association between independent variables i.e., sex, socio-economic status, locus of control, educational achievement status and dependent variables viz., physical position of the subjects while viewing, other behaviour like reading, writing, eating etc., along with viewing television, mode of watching television and person who decides the choice of programmes for watching.

From table 15, it is clear that there is no association between sex and physical position of the subjects while viewing television. The corresponding X^2 statistic is not significant. There is a definite association between socio-economic status and physical position of the subjects while viewing. Annexure K shows that most of the lower economic group children are viewing television by sitting on the floor. Nearly half of middle and upper economic group children are watching by sitting on the chair or sofa and one-fourth are watching by lying on the cot. The corresponding X^2 statistic is significant at 0.01 level. Locus of control and physical position of the subjects while viewing also seem to be highly associated. The corresponding X^2 statistic is significant at 0.01 level when compared to other

Table 15

X^2 Values for the Test of Association Between Independent Variables and Dependent Variables

Independent Variables	*Dependent Variables*							
	Physical Position While Watching	*df*	*Other Behaviour Along with Television Viewing*	*df*	*Mode of Watching Television*	*df*	*Person who Decides Choice of the Programme for Watching*	*df*
1. Sex	0.205@	4	0.3@	3	0.56@	2	5.1*	2
2. Socio-economic Status	47.55**	8	3.31@	6	29.4**	4	26.54*	4
3. Locus of Control	27.40*	8	5.49@	6	17.68**	6	24.7**	4
4. Educational Achievement Status	—	—	8.8@	8	—	—	21.71**	4

Note : @ Not significant

* Significant at 0.10 level

** Significant at 0.01 level.

ways of viewing, very few children are watching television by standing. Children belong to upper socio-economic status and having high internal locus of control are not viewing television by standing.

Behaviour like reading, writing, eating, playing indoor games are also noted while watching the television. Irrespective of sex, socio-economic status, locus of control and educational achievement status, most of the children are eating something (food or snacks) along with television viewing. There seems to be no association between independent variables and other behaviour along with television viewing. X^2 is not significant.

This study also shows the mode of watching television by the children, that is whether children are watching randomly or with any pre-planning, or whether children are watching only selected programmes or they keep switch on television before and after the selected programme to be watched. The table also shows whether children are watching television alone or along with others.

It is also observed that no single child is watching television with pre-planning. Nearly 50 per cent of both boys and girls are watching television randomly. There is no association between sex and mode of watching television. The corresponding X^2 statistic is not significant. There is a definite association between socio-economic status and mode of watching television. Majority of children belonging to lower socio-economic group (86.2 per cent) are watching television randomly. On the other hand, most of children from upper economic group (43.3 per cent) are watching only selected programmes. The corresponding X^2 staristic is highly significant $P < 0.01$ level). Locus of control and mode of watching television also are highly associated. Most of the children with external and low internal locus of control are watching television programmes randomly, where as majority of children with high internal locus of control (65.2 per cent) are watching only selected programmes. The corresponding X^2 statistic is significant at 0.01 level. From annexure M, it is also clear that more than 90 percent of children irrespective of sex, socio-economic staus and locus of control are watching television along with others rather than alone.

From the table, it is clear that 53 per cent of boys and 43 per cent of girls are viewing television programmes decided by their parents. Boys seem to have an independent behaviour in deciding programmes to watch, than girls. Majority of girls are watching programmes decided by their parents or by requesting parents or an adult member to switch on the programme. The corresponding X^2 statistic is significant at 0.10 level (see table 15, p. 106). In lower socio-ecnnomic group, majority of children (58.6 per cent) are deciding the programmes for wa'ching by themselves. In middle and upper economic groups, majority of children are watching programmes decided by their parents. When compared to children belonging to middle economic group, children from upper economic group tend to have an independent behaviour in deciding the programmes for watching. Thus trere seems to be a great asssociation between socio-economic status and control over the choice of programmes. The corresponding X^2 statistic is significant at 0.01 level. Most of the children with external locus of control (66.7 per cent) are deciding television programmes for watching by themselves. Children with low internal locus of control (56.8 per cent) are watching programmes decided by their parents. 45.7 percent of children with high internal locus of control are watching the pragrammes deeided by their parents and 37 per cent are deciding the programmes for themselves. Thus locus of control and control over the choice of programmes are strongly associated and the corresponding X^2 statistic is significant at 0.01 level.

There is a strong association between educational achievement status and the control over choice of programmes for watching. As the educational achievement status of the child increases, decision of the programmes for watching by the parents seems to be increasing, X^2 is significant at 0.01 level. Since the association between educational achievement status and physical position and mode of watching television were felt to be not necessary, X^2 is not calculated for these two variables in Table 15.

Table 16 shows the average distance of viewing by the children from the television set across the levels of sex, socio-economic status and locus of control. There seems no significant difference between boys and girls in mean distance of viewing from the set. From the table, it is clear that as the socio-economic status increases, the distance of viewing from the set is also increasing. The same phenomena is found with the locus of control also. Children having high internal locus of control are watching television at a greater distance than children with external and low internal locus of control.

Table 16

Average distance of viewing from the television set (feet & metres)

	Mean distance of viewing from the television	
	Metres	*Feet*
1. *Sex*		
Boys (n=96)	1.46	4.8
Girls (n=84)	1.40	4.6
2. *Socio-economic status*		
Lower (=29)	1,1	3.5
Middle (n=61)	1.4	4.5
Upper (n=90)	1.8	6.0
3. *Locus of control*		
External control (n=30)	1.3	4.2
Low internal control (n=44)	7.3	4.4
High internal control (n=46)	1.4	4.6

The study also shows the parents' explanation about the programmes which are not understood by the child while watching television, discussion of the child about the programmes after viewing and also the rememberence of the child about the programmes viewed on television and application of it in daily life.

From the study it is clear that 40 per cent of parents of boys and girls are explaining things which are not understood by the children while watching television. As the socio-economic status increases the parents explanation about the programmes which are not understood by the children seem to be increasing. Majority of the parents of children with internal locus of control are explaining about the programmes than parents of children with external locus of control. Regarding the discussion of the child about the programmes after viewing, it seems that one-fourth of boys and girls are discussing about the programmes and three-fourths are not discussing. Children from lower socio-economic group are not at all discussing about the programmes after viewing and 31.1 per cent of children from middle and upper economic groups are discussing about the programmes after viewing. Majority of the children with internal locus of control are discussing about the programmes than children with external locus of control. It is also noted that very few children irrespective of sex, socio-economic status and locus of control are remembering about the programmes watched and applying in their daily life.

Table 17 shows the effect of television on child's noted spent on various activities viz., play, household activities, reading and home work.

Parents of the children were questioned that "whether introduction of television in home affects the child's time spent in play, household activities, reading and home work ?" Their answers were tabulated in Table 17. From the table, it is clear that 62 per cent of parents of boys and 50 per cent of girls' parents felt that television had affected their children's time spent in play. Nearly 40 per cent felt that television had

Table 17
Effect of television viewing on children's time spent on various activities

	Activities							
	Play		*Household activities*		*Reading*		*Home work*	
	Yes	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
1	2	3	4	5	6	7	8	9
1. Sex								
Boys (n=96)	62,5*	37.5	9.4	90.6	44.8	55.2	41.7	58.3
	(60)	(36)	(9)	(87)	(43)	(53)	(40)	(56)
Girls (n=84)	50.0	50.0	17.9	82.1	53.6	46.4	45.2	54.8
	(42)	(42)	(15)	(69)	(45)	(39)	(38)	(46)
2. Socio-economic status								
Lower (n=29)	72.5	27.6	27.5	72.4	55.2	44.8	72.4	27.6
	(21)	(8)	(8)	(21)	(16)	(13)	(21)	(8)
Middle (n–61)	63.9	36.1	23.0	77.0	65.6	34.4	49.2	50.8
	(39)	(22)	(14)	(47)	(40)	(21)	(30)	(31)
Upper (n=90)	46.7	53.3	2.2	97.8	35.6	64.4	30.0	70.0
	(42)	(48)	(2)	(88)	(32)	(58)	(27)	(63)

Cond.

1	2	3	4	5	6	7	8	9
3. Locus of control								
External control (n=30)	80.0	20.0	50.0	50.0	60.0	40.0	63.3	36.7
	(24)	(6)	(15)	(15)	(18)	(12)	(19)	(11)
Low internal control (n=44)	34.1	65.9	19.2	81.8	79.5	20.5	56.8	43.2
	(15)	(29)	(8)	(36)	(35)	(9)	(25)	(19)
High internal control (n=46)	36.0	63,0	2.2	97.8	54.3	45.7	43.5	56.5
	(17)	(29)	(1)	(45)	(25)	(21)	(20)	(26)

Note : Top figures refer to percentages and bottom figures in parenthesis refer to frequencies.

affected their children's reading and home work. When compared to boys' parents, girls' parenis felt more about the effect of television on household activities.

When compared to middle and upper socio-economic groups, more number of parents belonging to lower socio-economic status group felt that television had affected their children's time spent in play, household activities, reading and doing home work. More than 50 per cent of parents belonging to upper economic group felt that television had not affected their children's time spent in play, reading, household activities and home work.

As per the parents' opinion, television seems to affect the children with external locus of control more than children with internal locus of control. Among internal control group also, children with low internal locus of control seem to be most affected than children with high internal locus of control.

Table 18 shows the tabulation of answers given by the parents to the question, "whether introduction of television leads to delay in child 'bed time'—if yes, how much delay ?"

From the tables 18, it is clear that 22 percent of boys parents and 27 percent of girl's parents felt that television had led to daily in their children's bed time. When compared to middle and upper economic groups, bed time of children belonging lower economic group seems to be least affected by television. Children with internal locus of control seem to be going to bed late in the night than children with external locus of control, as a result of television watching.

Among those parents who mentioned that television had led to delay in their children's bed time, three-fourths of parents felt that the delay is not more than 45 minutes. Majority of them felt that the delay is between 10 –20 minutes. Delay in bed time seems to be more than 45 minutes for children those who belong to upper economic status and those who are having high internal locus of control.

Table 18

Number of parents responding to the items on Effect of television viewing on child's bed time

	Whether television leads to delay in bed time		*Delay in child's bed time (minutes)*			
	Yes	*No*	*10—20*	*20—30*	*30—40*	*45 and above*
1. *Sex*						
Boys (n=96)	21.9* (21)	78.1 (75)	47.6 (10)	33.3 (7)	9.5 (2)	9.5 (2)
Girls (n=84)	27.4 (23)	72.6 (61)	39.1 (9)	39.1 (9)	13.0 (3)	8.7 (2)
2. *Socio economic status*						
Lower (n=29)	17.2 (5)	82.8 (24)	60.0 (3)	40.0 (2)	—	— —
Middle (n=61)	31.2 (19)	68.9 (42)	42.1 (8)	47.4 (9)	10.5 (2)	—
Upper (n=90)	22.2 (20)	77.8 (70)	40.0 (8)	25.0 (5)	15.0 (3)	20.0 (4)
3. *Locus of control*						
External control (n=30)	16.7 (5)	83.3 (25)	80.0 (4)	20.0 (1)	—	—
Low internal control (n=64)	45.5 (20)	54.5 (24)	40.0 (8)	45.0 (9)	15.0 (3)	—
High internal control (n=46)	41.3 (19)	58.7 (27)	36.8 (7)	31.5 (6)	10.5 (2)	21.1 (4)

Note : Top figures refer to percentages and bottom values in parenthesis refer to frequencies.

Analysis of Parents' Attitudes Towards their Children's Television Viewing.

Section 3 of omnibus schedule for parents consists of parents' attitudes towards their children's television viewing.

As per the key given in annexure—A, parents responses to attitude scale items were scored, A maximum score of 10, indicates positive attitude towards television viewing. Average attitude scores of parents are given in Table 19.

Table 19

Mean attitude scores of parents

	Mean scores
1. *Sex*	
Boys (n=96)	4.27
Girls (n=84)	3.98
2. *Socio-economic status*	
Lower (n=29)	3.31
Middle (n=61)	3.93
Upper (n=90)	4.18
3. *Locus of control*	
External control (n=30)	3.65
Low internal control (n=44)	4.13
High internal control (n=46)	3.73

Table 19 shows that boys' parents seem to have more positive attitude towards television viewing than parents of girls. But the difference is not significant. Parents of upper socio-economic group tend to have positive attitude towards their children's telvision viewing than parents of middle and lower socio-economic groups. Parents of children who were identified as having low internal locus of control seem to have more positive attitude towards television viewing than parents of children those who have external and high internal locus of control.

In order to see the attitudes of parents, regarding the effect of television on children's scholastic performance, items, 3, 4, 7, 8 of parent's attitude scale were selected and number of parents those who expressed agree and disagree to these items were tabulated in Table 20.

Table 20

Parents' responses in percentages (frequencies in parenthesis) to items (3, 4, 7 and 8) in the attitude scale pertaining to their children's television viewing

Sex	*Items*							
	3		*4*		*7*		*8*	
	Agree	*Disagree*	*Agree*	*Disagree*	*Agree*	*Disagree*	*Agree*	*Disagree*
Boys	59.4	40.6	43.7	56.3	45.8	54.2	57.3	42.7
(n=96)	(57)	(39)	(42)	(54)	(44)	(52)	(55)	(41)
Girls	64.3	35.7	38.1	61.9	60.7	39.3	41.7	58.3
(n=84)	(54)	(30)	(32)	(53)	(51)	(33)	(35)	(49)

Item 3 :	Television makes children more lazy and less interested in studies.
Item 4 :	Television makes people broad minded.
Item 5 :	As a result of television's introduction in the home the child is studying less and thus getting low marks than before.
Item 8 :	Because of introduction of television, children have learnt many unknown things and thus showing good academic performance.

Table 20 shows that 59.4 percent of boys parents and 64.3 percent of girls' parents agreed the item 3 in parent's attitude scale. Majority of girls' parents felt that television is making children as lazy and less interested in studies. 43.7 percent of boys' parents and 38.1 percent of girls parents felt that "television makes people as broad minded". 45.8 percent of boys' parents and 60.7 percent of girls' parents mentioned that "as a result of television's introduction in the home, child is studying less and thus getting low marks than before". Answering to item 8 in parent's attitude scale, 57.3 percent of boys' parents and 41.7 percent of girls' parents felt that "because of introduction of television, children have learnt many unknown things and thus showing good academic performance" on the whole, when compared to parents of girls, Parents of boys seem to have more positive attitude towards their children's television viewing.

Analysis of Television Viewing Behaviour Pattern
(As reported by the children)

In order to know the television viewing behaviour pattern of children, 180 school going children with age range of 5 years—10 years, who are possessing television in their homes were interviewed. All children who are having a television set in their homes are watching television. Table 21 shows the place where children are watching television.

From Table 21, it is clear that, 85.4 percent of boys and 95.2 percent of girls are watching television in their own house. 8.3 percent of boys and 3.6 percent of girls are watching in their neighbour's house also. 6.3 percent of boys and 1.2 percent of girls are watching in their relatives' house along with their viewing at home. Comparatively boys which television outsides a little more than girls. The corresponding X^2 statistic is significant at $P<0.10$ level of significance. Children belong in lower and upper socio-economic group are watching television outside less than children from middle socio-economic group. The corresponding X^2 statistic is significant at 0.10 level. All children having high internal control are watching television in their own houses only. Nearly equal number of children having external control and low internal control are watching television outside the house along with their viewing at home. The X^2 statistic between locus of control and place of watching is significant at 0.10 level but not at 0.05 level.

Table 21

Number of children responding to the item on watching of television and place of watching

	Does the child watch television		*Place of watching*			
	Yes	*No*	*In own house*	*In neighbours house*	*In relatives house*	*Other place*
1. *Sex*						
Boys (n=96)	100* (96)	—	85.4 (82)	8.3 (8)	6.3 (6)	—
Girls (n=84)	100 (84)	—	95.2 (80)	3.6 (3)	1.2 (1)	—
2. *Socio-economic status*						
Lower (n=29)	100 (29)	—	93.1 (27)	6.9 (2)	—	—
Middle (n=61)	100 (61)	—	80.3 (49)	11.5 (7)	8.2 (5)	—
Upper (n=90)	100 (90)	—	95.6 (86)	2.2 (2)	2.2 (2)	—
3. *Locus of control*						
External control (n=30)	100 (30)	—	83.3 (25)	10.0 (3)	6.7 (2)	—
Lower internal control (n=44)	100 (44)	—	84.1 (37)	9.1 (4)	6.8 (3)	—
High internal control (n=46)	100 (46)	—	100.0 (46)	—	—	—

*Note : Top figures refers to percentages and bottom figures in parenthesis refer to frequencies.

Table 22 shows mean time (minutes) spent for watching at home per day and in other's house per week.

Table 22

Average number of minutes viewed by children

	Duration of viewing (minutes)	
	At home per day	*In others house per week*
1. *Sex*		
Boys (n=96)	46.1	25.0
Girls (n=84)	51.2	20.5
2. *Socio-economic status*		
Lower (n=29)	52.5	20.2
Middle (n=61)	45.8	25.4
Upper (n=90)	49.7	25.1
3. *Locus of control*		
External control (n=30)	51 .5	15.5
Low internal control (n=44)	45.0	30.4
High internal control (n=46)	50.6	—

From table 22, it is clear that irrespective of sex, socio-economic status and locus of control no child is watching more than half-an-hour per week in other's house. Girls, children from lower socio-economic groups and children with external locus of control are spending more time on watching television per day.

Table 23 shows the distribution of mean television viewing time (minutes) on regular days, weekends and holidays by the children. On the whole, viewing time is peak during evening when compared to morning and afternoon. On sundays mornings, television viewing is high. Viewing time is more on weekends, but there is no much difference between regular days and holidays in their viewing from evening to night.

Table 23

Distribution of mean television viewing time (minutes) per day

	Mean time (minutes		
	Morning	*Afternoon*	*Evening to night*
Regular days	4	—	46
Range	(0—20)		(10—95)
Saturdays	5	—	96.8
Range	(0—25)		(15—120)
Sunday	48	25	129
Range	(10—150)	(0—75)	(30—185)
Holidays	28	15	44
Range	(10—45)	(0—60)	(10—90)

Children were asked that "whether they have any favourite television programme ? If yes, mention the programme". Basing on the answers given by the child, the programmes were classified into four groups.

Table 24 shows the X^2 values for the independent variable and children's favourite television programmes.

From the study it is clear that nearly 90 percent of both boys and girls have some favourite television programmes. Majority of boys expressed that children programmes are their most favourites, next comedy serials, story seriala, films and film songs. Most of the girls are liking "children's programme first, next films and film songs, story serials and the comedy

Table 24

X^2 values for the test of association between independent variables and dependent variables

Independent variables	*Dependent variable*	
	Children's favourite televisoin programme	*df*
1. Sex	6.2 *	3
2. Socio-economic status	4.1618 **	6
3. Locus of control	4.118 **	6
4. Educational achievement status	2.958 **	6

** Not significant

* Significant at 0.10 level.

serials. The corresponding X^2 statistic is found to be significant at 0.10 level but not at 0.05 level. There is no association between socio-economic status and favourite television programmes. Most of children belonging to all types of socio-economic groups mentioned that children's programmes are their favourite programme. Next to children's programmes, films and film songs and story serials are the favourite programmes. The corresponding X^2 statistic is not significant. Majority of the children who are having external locus of control mentioned that children's programmes are their favourite programmes. Children having internal locus of control mentioned that story serials, are their favourite programmes. The corresponding X^2 statistic is not significant. There is no association between educational achievement status and favourite television programmes also. The corresponding X^2 statistic is not significant.

Table 25 shows the rememberance of television serials by the children. Answering to the question "does the child remember television serials and view them continuously on the successive weeks ?" more than half of the sample of boys and

Table 25
Number of children responding to the item, on rememberance of television serials

	Yes	*No*
1. *Sex*		
Boys (n=96)	55.2* (53)	44.8 (43)
Girls (n=84)	58.3 (49)	41.7 (35)
2. *Socio-economic status*		
Lower (n=29)	72.4 (21)	27.6 (8)
Middle (n=61)	68,9 (42)	31.3 (19)
Upper (n—90)	43.3 (39)	56.7 (51)
3. *Locus of control*		
External control (n=30)	63.3 (19)	36.7 (11)
Low internal control (n=44)	81.8 (36)	18.2 (8)
High internal control (n=46)	82.6 (38)	17.4 (8)

**Note* : Top figures refer to percentages. Bottom values in parenthesis refer to frequencies.

girls and that they are remembering the serials and viewing them continuously. Among the children belonging to different socio-economic groups, children from lower socio-economic groups (72.4 percent) seem to be remembering television serials more than middle and upper socio-economic groups. Majority of the children (80 percent) having internal locus of control are remembering the television serials and viewing them successively than children with external locus of control.

Table 26

X^2 values for the test of association between independent variables and dependent variables

Independent variables	*Dependent variables* *Feeling of the child if he/she misses favourite programme*	*df*
1. Sex	4.605 @	2
2. Socio economic status	9.99 **	4
3. Locus of control	7.13 *	4
4. Educational achievement status	7.915 @	4

* Significant at 0.20 level

** Significant at −0.05 level

@ Significant at 0.10 level.

Table 26 shows the association between independent variables and feeling to the child, if the child misses favourite television programme.

From above Table 26 it is clear that sex and child's feeling if he/she misses favourite programme are associated at 0.20 level of significance. Girls seem to feel more than boys. Children belonging to lower and middle socio-economic groups are feeling more than upper economic group children, if they miss their favourite programme The corresponding X^2 statistic is significant at 0.05 level but not at 0.01 level. 23.3 percent of children having external locus of control seem to be very

Table 27

Number of children responding to the item on effect of television on children's time spent on various activities

	Various activities							
	Play		*Household activities*		*Reading*		*Homework*	
	Yes	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
1. *Sex*								
Boys (n=96)	46.9* (45)	53.1 (51)	8.3 (8)	91.7 (88)	40.7 (39)	59.4 (57)	36.5 (35)	63.5 (61)
Girls (n=84)	47.6 (44)	52.3 (44)	14.3 (12)	85.7 (72)	45.2 (38)	54.8 (46)	34.5 (29)	65.5 (55)
2. *Socio-economic status*								

Lower (n=29)	51.7 (15)	48.3 (14)	27.6 (8)	72.4 (21)	51.7 (15)	48.3 (14)	62.1 (18)	37.9 (11)
Middle (n=61)	47.5 (28)	52.5 (32)	14.8 (9)	85.3 (52)	60.7 (37)	39.3 (24)	39.3 (24)	60.7 (37)
Upper (n=99)	45.6 (14)	54.4 (49)	3.3 (3)	96.7 (87)	27.8 (25)	72.2 (65)	24.2 (22)	75.6 (68)
3. *Locus of control*								
External control (n=30)	70.0 (21)	30.0 (9)	46.7 (14)	53.3 (16)	50.0 (15)	50.0 (15)	53.3 (16)	46.7 (14)
Low internal control (n=44)	34.1 (15)	65.9 (29)	20.5 (6)	79.4 (35)	77.3 (34)	22.7 (10)	59.1 (26)	40.9 (18)
High internal control (n=46)	37.0 (17)	63.0 (29)	2.2 (1)	97.8 (45)	54.3 (25)	45.7 (21)	39.1 (18)	60.9 (28)

**Note* : Top figures refers to percentages and bottom figures in parenthesis refer to frequencies.

depressed for the whole day, if they miss favourite television programme. Children with low internal locus of control seem to feel more than children with external and high internal locus of control, if the favourite programme is missed.

Children were asked that "whether introduction of television in home affects their time spent in play, home work, reading and household activities" ? The responses of the children were tabulated in Table 27 (see p. 124).

From Table 27, it is clear that more than 40 percent of both boys and girls felt that their play and reading are affected as a resnlt of television. Nearly 65 per cent of boys and girls felt that their home work is not affected. When socio-economic status is considered, most of the children (92.1 percent) belong to lower socio-economic group felt that their home work is affected. Majority of children from middle socio-economic group (60.7 percent) felt that their reading is affected and most of the children belonging to upper socio-economie group (45.9 percent) felt that their play is affected as a result of television viewing. Majority of the children having external control (70 percent) felt that their play is affected and majority of the children with internal locus of control felt that their reading is affected as a result of television viewing. From Table 27 it is also clear that helping in the household activities by the children seem to be least affected when compared to others, as a result of television's introduction in the house.

Table 28 shows the effect of television viewing on school work and mode of making it up by the child. 28.1 percent of boys and 29.8 percent of girls said that television viewing has affected their school work. Among them majority of girls and boys are making it up by waking early in the morning. 26 percent of boys and 20 percent of girls are just leaving it. The rest are making up the school work by going to bed, late in the night. Among children belonging to different socio-economic groups, lower socio-economic group children's (44.8 percent) school work is mostly affected. Majority of lower and middle class children are making up their affected home work by making early in the morning. Most of children (44.4 percent) from upper socio-economic group are making up the home work by going to bed, late in the night. Children having internal locus

Table 28

Number of children responding to the item on effect of television viewing on school work and mode of making it up by the child

	Whether TV affects school work		*If 'yes' how does the child make it up*		
	Yes	*No*	*By waking early in the morning*	*Going to bed late in the night*	*By just leaving it*
1. *Sex*					
Boys (n=96)	28.1* (27)	71.9 (69)	44.4 (12)	29.6 (8)	26.0 (7)
Girls (n=86)	29.8 (25)	70.2 (59)	60.0 (15)	20.0 (5)	20.0 (5)
2. *Socio-economic status*					
Lower (n=29)	44.8 (13)	55.2 (16)	53.8 (7)	23.1 (3)	23 1 (3)
Middle (n=61)	34.4 (21)	65.6 (40)	66.7 (14)	9.5 (2)	23.8 (5)
Upper (n=90)	20.0 (18)	80.0 (72)	33.3 (6)	44.4 (8)	22.2 (4)
3. *Locus of control*					
External control (n=30)	46.7 (14)	53.3 (16)	40.0 (6)	33.3 (5)	26.7 (4)
Low internal control (n=44)	36.4 (16)	63.6 (28)	50.0 (8)	31.3 (5)	18.7 (3)
High internal control (n=46)	26.1 (12)	73.9 (34)	33.3 (4)	66.7 (8)	—

**Note* : Top figures refer to percentages and bottom figures in parenthesis refer to frequencies.

of control seem to be less affected in doing their home work than children who are identified as having external control. Most of the children having external locus of control and low internal locus of control are waking early in the morning, and children with high internal locus of control are going to bed late in the night to cope up their school work affected as a result of television viewing.

As per the sample schedule given in children's omnibus schedule mean time (minutes) spent in watching television during a week was calculated and tabulatedin Table 29.

Table 29 shows that both boys and girls are watching television for maximum time during the week ends. There is no much difference between boys and girls in their viewing time. Children belonging to lower socio-economic group seem to be spending more time on watching television on all days of the week than children belonging to middle and upper socio-economic groups. Children having external control seems to be spending more time on watching television than children with internal l cus of control. Viewing time is more on Wednesday, Friday, Saturday and Sunday, during which feature film and film based songs are being broadcasted.

Children are asked about the practice of things learnt from television. Their responses were tabulated in Table 30.

From the table 30, it is clear that one-fourth of boys and 15.5 percent of girls mentioned that they are practicing the things learnt from television. When compared to other socio-economic groups, more children from upper socio-economic group (23.3 percent) mentioned that they practice things learnt from television.

Very few children (3.3 percent) having external control mentioned that they practice things learnt from television. On the other hand, around 30 percent of children having internal control mentioned that they practice things learnt from television viewing.

Table 29

Distribution of mean time (minutes) spent on watching television during a week (as given by the children)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1. *Sex*							
Boys (n=96)	38.3	38.3	61.2	43.5	65.5	103.8	179.2
Girls (n=84)	39.2	41.5	64.9	44.5	65.4	105.1	186.1
2. *Socio-economic status*							
Lower (n=29)	42.6	45.0	65.2	47.5	68.9	110.5	213.3
Middle (n=61)	36.0	36.7	60.0	43.5	63.0	95.1	120.9
Upper (n=90)	38.1	39.5	65.0	43.7	64.5	102.5	171.0
3. *Locus of control*							
External control (n=30)	40.2	42.8	66.3	51.0	68.1	114.2	163.9
Low internal control (n=44)	37.5	30.0	63.4	42.8	64.3	87.6	150.0
High internal control (n=46)	40.2	40.3	60.1	46.0	62.5	112.3	135.1

Table 30

Number of children responding to the item, on practice of things learnt from television viewing

	Practice of things learnt from television	
	Yes	*No*
1. *Sex*		
Boys (n=96)	24.0* (23)	76.0 (73)
Girls (n=84)	15.5 (13)	84.5 (71)
2. *Socio-economic status*		
Lower (n=29)	10.3 (3)	89.7 (26)
Middle (n=61)	19.7 (12)	80.3 (49)
Upper (n=90)	23.3 (21	76.7 (69)
3. *Locus of control*		
External control (n=30)	3.3 (1)	96.7 (29)
Low internal control (n=44)	27.3 (12)	72.7 (32)
High internal control (n=46)	30.4 (14)	69.6 (32)

**Note* : Top figures refer to percentages and bottom figures in parenthesis refer to frequencies.

Table 31 shows the feeling of the child after viewing a programme on television.

From table 31, it is clear that 80 percent of boys and girls are enjoying after viewing on television. As the socio-economic status increases feeling of distress, lack of interest, fear and anxiety after viewing the programme seem to be decreasing and feeling of joy seems to be increasing. 10.3 percent of children belonging to lower socio-economic group seem to feel distress and lack of interest after viewing a programme. Children with internal locus of control are enjoying much after viewing a programme than children with external locus of control. No child having high internal control is feeling distressed or lack of interest after viewing a programme on television.

Table 31

Number of children responding to the items on feeling of the child after viewing a programme on television

	Feeling of the child			
	Distresses	*Lack of interest*	*Shows fear and anxiety*	*Enjoys*
1. *Sex*				
Boys (n=96)	2.1*	4.2	11.4	80.3
	(2)	(4)	(11)	(79)
Girls (n=84)	3.5	5.9	9.5	80.9
	(3)	(5)	(8)	(68)
2. *Socio-economic status*				
Lower (n=29)	10.3	10.3	13.8	65.5
	(3)	(3)	(4)	(19)
Middle (n=61)	1.6	6.6	13.1	78.7
	(1)	(4)	(8)	(48)
Upper (n=90)	1.1	2.2	7.8	88.9
	(1)	(2)	(7)	(80)
3. *Locus of control*				
External control (n=30)	6.7	13.3	20 0	60.0
	( )	(4)	(6)	(18)
Low internal control (n=44)	4.5	6.8	11.4	77.3
	(2)	(3)	(5)	(34)
High internal control (n=46)	—	—	4.3	95.7
			(2)	(44)

**Note* : Top figures refer to percentages and bottom figures in parenthesis refer to frequencies.

Analysis of Children's Attitudes towards Television Viewing (CATV)

Section 2.0 of omnibus schedule for children consists of children's attitudes towards television viewing (CATV). The attitudes of children were scored. A maximum score of 9 indicates positive attitude towards children's television viewing. Average attitude scores of children are given in Table 32.

Table 32

Mean attitude scores of children

	Mean scores
1. *Sex*	
Boys (n=96)	6.19
Girls (n=84)	5.95
2. *Socio-economic status*	
Lower (n=29)	6.44
Middle (n=61)	5.95
Upper (n=90)	5.26
3. *Locus of control*	
External control (n=30)	5.47
Low internal control (n=44)	5.94
High internal control (n=46)	6.35

From table 32, it is clear that boys have a little more positive attitude towards television viewing than girls. But, there seems no significant difference between boys and girls in their attitude towards television viewing. Children from lower socio-economic group seem to have more positive attitude than middle and upper socio-economic group children. Similarly children having external control seem to have more positive attitudes towards television watching than children with internal locus of control. As the socio-economic status increases and

Table 33

Children's responses in percentages (frequencies in parenthesis) to items (3, 4, 7, 8 and 9) in the attitude scale pertaining to their television viewing

	Items									
	3		4		7		8		9	
	Agree	*Dis-agree*	*Agree*	*Dis-agree*	*Agree*	*Dis-agree*	*Agree*	*Dis-agree*	*Agree*	*Dis-agree*
Sex										
Boys (n=96)	35.4 (34)	64.6 (62)	60.4 (58)	39.6 (38)	29.2 (28)	70.8 (68)	71.9 (69)	28.1 (27)	26.0 (25)	74.0 (71)
Girls (n=84)	33.3 (28)	66.6 (56)	59.5 (50)	36.9 (31)	29.8 (25)	70.2 (59)	65.5 (55)	34.5 (29)	17.9 (15)	82.1 (69)

Item 3 : Because of television viewing. I am not able to cope up with my school work.
Item 4 : Television viewing is helping me a lot in my school work.
Item 7 : As a result of television watching, I feel disinterested in studies.
Item 8 : As a result of television watching, I gained more knowledge, thus getting good marks.
Item 9 : Due to watching television, my eye-sight is affected.

as the IAR (I) scores decreases, positive attitude towards television viewing seems to be increasing.

To see the attitudes of children regarding the effects of television on their personal and education development, items, 3, 4, 7, 8, 9 of CATV were selected from section 3.0 of children's omnibus schedule and frequencies and percentages of agree and disagree answers given by the children for these items were calculated and tabulated in Table 33.

35.4 percent of boys and 33.3 percent of girls mentioned that they agree to item 3 and nearly 66 percent mentioned that they disagree. Answering to item 4, 60 percent of both boys and girls felt that television viewing is helping a lot in their school work. 29.2 percent of boys and 29.8 percent of girls mentioned that they agree to item 7. Nearly 70 percent of boys and girls felt that television watching improved their knowledge and thus they are getting good marks. Answering to item 9, more number of boys (26 percent) when compared to girls (17.9 percent) expressed that television watching affected their eye-sight.

6

Discussion

> Books and plays are diversions about which most of us exercise some decision, even if our selection is based on totally misleading publicity. The movies are in the twilit zone-television is even lower down the scale of human chioce. We nearly always see it by default.
>
> *Quentin Crisp*
> *British Writer.*

This chapter presents an interpretation of the results of statistical analysis of data obtained in the present study, in the light of evidences of the existing literature reviewed. The results are discussed systematically basing on the objective of the study, at the same time indicating the possible theoretical and practical implications.

The first objective for discussion is—to understand the influcnce of sex and social class on television viewing behaviour of children. Among the several socio-demographic variables age, sex and social class are the most commonly used in social science research. The reasons are many. To mention a few, an individual's behaviour in a social situation is caused by a complex interaction of beliefs, opinions, values and roles within a cultural setting. A person's age, sex and social class levels are therefore logically crucial ones for any consideration of the possible effects on behaviour patterns.

Children's television viewing behaviour has not received much attention in our conutry as it should have given Roberts (1973) mentioned that media use patterns are best described in terms of variables like age, intelligence, sex, family socio-economic status and so on. Schramm et al., (1961) also mentioned that age, mental ability and social class background, were important in determining the viewing habits of children Therefore the investigator has made an attempt to assess empirically, the manner in which the sex, social class, educational achievement status and locus of control get involved in television viewing behaviour of children particularly in elementary school age (5+ to 10+).

In the following pages children's television viewing behaviour is discussed and an attempt is made to examine some of the factors which appear to operate as determinants of the various patterns of children's television viewing located by the above variables.

In the present study the information regarding children's television viewing was obtained from parents as well as children.

1. Children's Television Viewing Behaviour as Reported by Parents.

2. Children's television viewing behaviour can be studied under the following heads.

The time spent on watching television programmes by children.

Children's television viewing patterns.

Effects of television viewing on children's time spent on various activities.

The time spent on watching television programmes by children

How much time the child spends on television is depending upon many factors and varies from one country to other country. According to the studies conducted outside India, the peak viewing usually comes between the ages of five and six years, when the average amount of time reported is four hours daily (Witty, 9951). After the child enters school, the time declines to an average of two to three hours during school week, and more time over the week ends. Maccoby (1967) felt that, if one things solely in terms of the number of hours spent, there can be no doubt that television is a vastly important element in children's lives.

Table 9 shows that the mean viewing time of television per week as given by parents for boys is 11.08 hrs, and for girls is 11.52 hrs. Himmelweit, et al., (1958) found that in England on an average children spent about two hours a day watching the television programmes. They did not find sex difference. In the present study also, significant sex difference is not seen regarding the mean time of viewing per week. Comparatively, girls are watching television for more time than boys Braith Waite et al., (1981) in their study in Australia found that boys watched more television than girls. Eron and Others (1983) in their study in Chicago found that frequency of television viewing is similar for boys and girls. On the whole, they found that girls tend to watch television less than boys. This seems to be contradictory to the present findings. The reason may be that, the studies are conducted in diffetent countries. The amount of time children spend looking at television programmes varies from one nation to another, and similar may be the sex difference.

When the mean viewing time of Indian children as per the present study is compared against children in other countries, children in our country seem to be spending less time watching television, when compared to foreign countries. Schramn, Lyle and Parker (1961) found that in North America between their sixth and tenth birthdays, children's television viewing is two and one-half hours each day. Singer and others (1980) in connecticut found that children's television viewing ranged between 1 and 40 hours each week; the mean was 15 hours which is considerably below the national average of 20-30 hours for their age group (elementary school age). Krish et al., (1981) in West Germany found that their 14 year old subjects viewed television programmes more than 15 hours per week. Ribeiro de Almeida and others (1982) found that Brazillian children (ages 7-12 years) watched television for about 4 hours per day. When compared with children of other countries, the children belong to the present study are spending less time watching television. The reason may be that the amount of time children spend looking at televisian programmes varies from nation to another, depending on such factors as length of time television is on air each day, the availability of television receivers, the kinds of programmes broadcast, the length of school day, and other obligations children bear in terms of home work and household activities.

From Table 9 it is clear that the mean viewing time (hrs.) per week for children belonging to lower socio-economic status) (12.2 hrs.) is more than children belong to middle (10.13 hrs.) and upper socio-(10.7 hrs.) economic groups. Himmelweit and her co-workers (1958) did not find any significant difference between the children from the middle class homes and those from the working class homes. In the present study, significant difference is not seen between children belonging to middle socio-economic group and upper socio-economic groups.

Far the purpose of this study, a Television Viewing Index (TVI) was developed as mentioned in results, depending on the total number of viewing hours. From the results, it is clear that there are no heavy viewers (TVI – 70 – 100) in the sample. The reason may be that the sample consists of children in the age range of 5 to 10 years. Most of the children are not watching programmes after 9 p. m. Reasons are many. To mention a few, children of this age group who attend school from morning 9 A.M. to evening 4 P.M. may get tired, and may go to bed by 9 p.m. Another reason may be that, the language of the programmes telecast after 8.40 p.m. (Hindi and English) is not more familiar to children of this age. So most of them are watching regional programmes (5.30 p.m.—

8.40 p.m.) only. Probably, this may be reason for 95 per cent of sample are light viewers (TVI – 0—30) and 5 per cent are moderate viewers (TVI – 0 – 30) and there are no heavy viewers) in the sample.

From Table 10 it is clear that there is no ass ciation between sex and type of viewers *i.e.*, moderate viewers and light viewers. But there seems a definite association between socio-economic status and type of viewers. The results show that nearly one-fourth of children belonging to low socio-economic group are moderate viewers. Comparatively, very few children belong to middle socio-economic group (5 per cent) and upper socio-economic group (1 per cent) are moderate viewers. Thus, children belonging to lower socio-economic group seem to be watching television more than the middle und upper socio-economic group children. Felter (1984) mentioned that heavier television viewing was associated with lower intelligence and lower social class. Braith waite et al., (1982) also found that subjects from lower socio-economic families tended to be higher viewers. One of the reasons for higher television viewing by lower socio-economic group children can be obtained from table 5 which shows the association between socio-economic status and television purchased time. Most of lower socio-economic group families bought television sets one year or two years back. Majority of children belong to upper socio-economic group had television sets for more than three years. Since television is relatively novel to the children belong to lower socio-economic group, watching of television by these children may be more than the other two economic groups of children. Murray and Kippax (1978) found that when television is relatively novel, it is associated with marked decrement in a wide range of activities. They also mentioned that however, those children who have experienced television for a relatively longer period of time tend to return to their former levels of interest in other media and social participation opportunities. The same explanation is found to be suitable when Table 8 is observed, which shows the mean time spent (minutes) for various activities in a day during out of school time. The table shows that children belong to middle and lower socio-economic groups are spending most of their out of school time on watching television. On the other hand, children from upper socio-economic group are spending most of their out of school time on play. The reason may be that probably the novelty of television may be decreased for upper socio-economic group children, so they are engaging in other social participation activities. A number of studies conducted outside India also reported that, how long the family has owned a television set like wise influences the amount of time spent in watching programmes. For the first six months of ownership, it is like a "new toy" for the child in that it dominates the child's play time. After the child became bored or indifferent, thus spending relatively little time in watching programmes (Witty 1951, Wells and Lynch, 1954).

Table ·3 and 14 shows the distribution of television viewing by children on regular days, week ends and on holidays. Irrespective of sex and socio-economic status, all children are watching television for more time on week ends than on regular days. Himmelweit (1958) mentioned that Saturday night was the favourite viewing night since children did not have to prepare for their class work for the next morning. Schramn et al., (1961) also found that weekend viewing averages were higher, ranging from half-an-hout to an hour longer. From table 13, it is clear that children from lower socio-economic group are spending more time watching television than middle and upper socio-economic groups. Social class background was found to be important in determining the amount of time spent on viewing. Schram and his coworkes (1961) felt that children of well educated parents tended to watch television less than other children, following the examples set by their parents. Children of working class parents however, were likely to watch more. The authors speculated this difference in viewing time between social classes could be attributed to a difference in class norms. The middle class norms of work, activity, and self betterment influenced the viewing patterns of the middle class youngsters by giving them incentives to engage in other activities, there by reducing the time available for viewing.

When time spent on watching various programmes, *viz.*, educational, entertainment, news, sports, and advertisements is considered as in table 11, it is clear that, children are spending maximum amount of time on watching entertainment programmes. Kunhi Krishnan (1991) mentioned that the percentage of informative programmes telecast in Doordarshan is roughly 20 per cent, development programmes around 25 per cent, art and culture 20 per cent and entertainment nearly one-third of the total time of transmission. Since entertainment programmes constitute major part of telecast, children are also seem to be spending maximum amount of time watching entertainment programmes. Next to entertainment programmes, advertisements occupy most of the television watching time by the children. Barling and Fullagar (1983) found that children view television advertisement almost entirely in terms of their entertainment function. Sevanti Ninan (1991) mentioned that, as for advertising-induced consumerism, most of the things demanded were eatables like biscuits, chewing gum and tomato sauce. This did not not upset parents too much.

When compared to middle and upper socio-economic groups, children from lower socio-economic group are spending less time watching educational programmes and they are not at all watching news. Braith Waite et al., (1982), from their investigation also found that children from lower socio-economic families tending to be higher viewers and less impressed by educational programmes. In the present study, middle socio-economic group children are spending more time watching educational programmes, news and sports. On the whole, when compared to telecast time of educational programmes, children are watching educational programmes for less time. One of the reasons for watching educational programmes for less time by the children is that, both the regional and network educational programmes are being televised during the school hours. So most of the children are not able to watch the educational programmes except during holidays. Sevanti Ninan

(1991) mentioned that children watch a lot of news programmes, but there is some doubt about how much they absorb. Doordarshan's audience research unit did a one village study in Uttar Pradesh, earlier 1991 (The Hindu, August 4th 1991), which found that children watched all the foot age on the Gulfwar avidly but were not particularly well informed about the war after watching. A large number could not identify correctly the country that had invaded Kuwait. Nor is their knowledge of national news much better. So there is a need for research to identify what the children absorb from various programmes they watch. Maccoby (1967) felt that perhaps the most important thing to remember concerning children's choice of programmes is that they, like elders, use television primarily for entertainment. She felt that even when educational programmes are available few children watch them, if there is a choice of an entertainment programme to watch instead. Children who are seriously interested in informing themselves on a topic usually use books, magazines and news papers for this purpose.

Table 12 shows that mean time spent for watching entertainment programmes seem to increases as the television viewing index increases. Kunhi Krishnan (1991) opined that heavy viewers watch more of everything. But in the present research it was found that, as the viewing index increases children are watching entertainment programmes for more time, news and sports for less time and not at all watching educational programmes.

Thus from the above discussion, it is clear that majority of children in the present study are light viewers. Low socio-economic group children are watching television more than the other two groups. Most of the children are not watching programmes after 9 p.m. So programme planners must look into these aspects, and should plan programme accordingly keeping in view target audience and peak viewing time. From the present study, it is clear that weekend viewing is more for all children. Hence, preference for children's programmes should be given in the week ends while planning the programmes for children. Children are watching more entertainment programmes and less educational programmes. Recent experiments have shown that the elements of education and entertainment can be merged quite effectively. However, precautions must be taken to ensure that the two components are combined in harmonious proportions. One more thing clear from the present study is that children are watching educational programmes during holidays. So programme planners should plan effective educational programmes during holidays. If the educational programmes are based on academic syllabus and deal with the practical examples that can not be possible to show in classrooms, parents will also be motivated and will encourage children to watch such programmes. Then one of the prime concerns with which the television is introduced in our country can be successfully fullfilled, *i.e.*, raising the educational standard and ensuring uniform education to all sections of society without discrimination.

Children's Television Viewing Patterns

Television viewing patterns of children varies from one family to other and from one child to other. Parents could have a great influence on the ways in which their children watch television, not only by controlling what is seen, but by influencing the ways in which children watch. Generally parents share with their children the style of watching. Table 15 shows that there is association between socio-economic status and physical position of the subjects while viewing. It is also noted that most of the lower socio-economic group children are watching television by sitting on the floor. Nearly half of middle and upper socio-economic group children are viewing television by sitting on the chair or sofa and one-fourth are watching by lying on the cot. Hass (1964) mentioned that seating arrangements to use a television is important. The exact seating arrangement will depend upon the size and shape of the room. For better vision, it is necessary to confine seating arrangement to a space formed by a 45 degree angle. So watching television by sitting on chair or sofa seem to be good condition rather than lying, sitting on the floor or standing. There is a need to make parents aware of the correct physical position on their children while watching television.

Irrespective of sex and socio-economic status, most of the children are eating something (food or snacks) along with television watching. Maccoby (1951) in her study with children in the City of Cambridge also found that many parents have difficulty in getting children to leave the television set to come to meals, and some have solved this problem by serving meals to the children infront of the set. One-sixth of the families interviewed by her reported, doing this every hight, and half do it on occasion.

Table 15 shows that there is definite association between socio-economic status and mode of watching television by the children. Study shows that majority of lower socio-economic group children are watching television randomly. On the other hand, most of the upper socio-economic group children are watching only selected programmes. Crow and Crow (1962) felt that the child whose parents enjoy average or better socio-economic status usually is motivated to engage in so many other interesting activities that his television opportunities are reduced. More over, the child probably is expected to have dinner with the family rather to sit in front of the television set, while he is eating, and to go to bed at a specified time, before some of the more intriguing programmes are presented.

This study also shows that when compared to boys, majority of girls are watching programmes decided by their parents or by requesting parents or an adult member of the family to switch on the programme. Boys seem to have an independent say in deciding the programmes to watch than girls. One of the reasons for sex difference in programme decision may be due to cultural values and the rules and regulations found in the home. Bee (1978) mentioned that self-esteem among females is widely thought generally to be lower because so many of the qualities of feminity are less highly valued than are the qualities of 'masculanity'.

In lower socio-economic group, majority of children are deciding the programmes to be watched by themselves. Most of the middle and upper socio-economic group children are watching programmes decided by their parents. In one study, 61 per cent of children reported that they had no help from their parents in selection programmes, although 82 per cent of the group reported that they watched television with their parents (Hurlock, 1956). Witty (1954) mentioned that on the whole, the kind of programmes children select or would like to have are close to what their parents and teachers would choose for them.

Table 16 shows the average distance (feet and meters) of viewing from the television set by the children. Chakrabarti (1967) mentioned that children should not sit closer than 5-6 feet from the television set. They should not be seated also farther than about 20 feet from the set. From the table, it is clear that children belonging to upper socio-economic group are watching television at appropriate distance. Children belong to low socio-economic status are watching television from a very close distance, which is not good for better vision. Due to increase in urbanisation most of the middle and lower socio-economic families are living in small houses, thus the distance of watching television seem to be decreased. De Keiffer and Cochran (1962) mentioned that viewing distance should be 5 times picture width for closest viewing and 15 times picture width for maximum distance. From Table 4, it is clear that most of the families belonging to lower socio-economic group (62.1 per cent) and middle socio-economic group (41 per cent) are having portable television sets, which have a picture tube width of 36 cms. Their watching distance seem to be appropriate according to their television's picture width but there is a need for research to identify the effect of watching on portable television on eyes. Kunhi Krishnan (1991) mentioned that constant watching especially in colour may affect sight. So there is also need to identify, watching in which type of television (colour or black and white), of what width is good for better vision.

Study shows that as the socio-economic status increases, explanation of the parents about the programmes not understood by the children seem to be increasing. Buerkel et al., (1982) found that children who frequently watch family shows appear to believe that families in real life show support and concern for each other. Parent's positive interventions such as guiding their children towards family shows, viewing with them, commenting on show content and maintaining control over the amount of viewing can enhance what children learn about affilative behaviour from viewing family shows. Frederick (1978) found that comments can increase the amount of information, children can recall from television programmes. Thus it is clear that explanation of the parents and commenting of the parents about the television programmes while watching increases children's learning and recall of information from television programmes.

Effects of television viewing on children's time spent on various activities

Ever since, television watching became a popular form of amusement for children, there has been a great concern about it among parents and educators because of its competition with reading and other leisure time activities. Some maintain that television has more harmful effects than good, others take the opposite point of view.

Table 17 shows the effect of television viewing on child's time spent on various activities viz., play, household activities, reading and home work. From the results, it is clear that more thae fifty per cent parents of boys and 50 per cent parents of girls felt that television has affected their children's time spent in play. Several earlier studies also reported that because there are only a limited number of leisure hours in the day, the time the child spends on television watching is bound to cut into other activities. The result is that, the child spends less time on other form of play, especially out-of doors play and play with children (Maccoby, 1991).

When compared to middle and upper socio-economic groups, majority of parents belonging to lower socio-economic group felt that television has affected their children's time spent in play, household activities, reading and doing home work. Zuckerman et al., (1980) in their study found that light to moderate television viewing influences reading habits, although it need not interfere with reading skills. Research has shown that television viewing not only affects academic efforts but may also have a profound effect on cognitive development. Ahmad (1980) in his study with Pakistani children found that television subjects studied at home for shorter hours than non-television subjects and that television subjects only completed their school home work, in contrast to non-television subjects who devoted more time on school home work and self-study. Results of the present research shows that more than 50 per cent of upper socio-economic group parents felt that television has not affected their children's time spent in play, reading, household activities and home work. Rubinstein (1981) mentioned that there conditional processes which modify the nature of the effects of television. The context in which the viewing takes place (whether parents are watching with their children), the predisposition of the viewers, and event the sex and social class, can modify the effects of television.

Table 18 shows the effect of televesion viewing on child's bed time. Nearly one-fourth of both boys' parents and girls' parents felt that television viewing has led to delay in their children's bed time. Bed time seems to be least affected by television for children belonging to lower socio-economic groups. Majority of the parents felt that the delay in bed time was between 10-20 minutes. Maccoby (1951) in her study also found that bed time is a fairly serious problem for television parents, and children in television homes go to bed later than caildren of the same age in homes without television. Himmelwait et al., (1958) also found that television has led to a slight delay in children's bed time some where between 15-25 minutes per hight.

Thus it is clear that as per parents' reporting, television viewing seems to affect children's time spent in play for both boys and girls. Lower socio-economic group parents seem to feel more about the effect of television on household activities, reading and home work. Bed time seems to be not much affected as a result of television viewing.

Television seems to exert both positive and negative effects on children. Singer et al., (1980) found that there was a consistent relationship between parents and children viewing. Neuman (1986) found that media related behaviour was strongly tied to certain characteristic family patterns. Thus it seems that as Hiebert et al., (1982) stated, the medium's use is affected more by the family life styles than the life style is affected by the medium. A simple solution to remove negative effects of of television is that parents need to learn to use the off switch. Parents must control, the amount and kinds of content their children view. Hiebert (1982) felt that a child's use of television is an adult responsibility. So parents must be educated regarding the effective use of television for their children. If parents fail to help children understand this medium and be wise consumers of it, they miss an excellent opportunity to capture the constructive social, educational and recreational uses of television.

Television Viewing Behaviour as Reported by Children

Time spent on watching television

Television is one of the more recent and the most popular form of entertainment of today's children. Because, television is new and different and because it combine the features that appear to a child in both the movies and radio, the time spent on television watching is out of all proportions to other forms of play for far too many children (Hurlock, 1956).

The amount of time child spends watching television will be determined first of all by whether the family owns a television set. Since children who are having a television in the home are included in the study, all children are having television in their homes, and all are watching television Table 21 shows that more than 80 per cent of children who are having television are watching television in their own houses. Very few children who are having television in their houses, are also watching television in neighbours' house and relatives' house. The reasons for watching in others house reported by children were late returning of both working parents, frequent visits to relatives' house etc. One thing to be noted is that irrespective of sex and socio-economic status, no child is watching more than half-an-hour per week in others house. Maccoby (1951) mentioned that some advertising has claimed that television is a social asset for a child among friends of its own age, that it makes the child the center of a neighbourhood group. She felt that this may have been true when television was introduced. Now that television ownership has become so widepread, there are many owners' children whose friends all have television in their own homes. Maccoby (1951) from her study found that most or all of a child's friends have television sets, television seems to make the child more solitary rather than more social, for when a programme is on that they want to see, children usually separate and go to their own homes, instead of watching the programme together. Thus it shows that children do not spend more time with children of their own age once they have television. The trend is for children who have television to separate and watch television in their own homes rather than watch as a group, so that as more families own television, children spend less time with their playmates. Play is believed to have important functions for the growing child, through play, the child practices many sensory discriminations, and elements of motor skills, verbal skills, and social skills, which form a foundation for child's repertoire of behaviour in later life. So there is a need for parents and eductors to think about this aspect.

Table 23 shows the distribution of mean viewing time (minutes) of television on regular days and week ends. On the whole, viewing time of children is peak during evening to night when compared to morning and after-noon. Children are busy with their preparation for school in the morning time during regular days, so they are spending very little with watching television. Some children are not at all watching television during morning times on regular days. Regional educational progrommes, (i.e., tele school), are being televised during this morning hours only (9 a.m. to 9.45 a.m.). So most of the children are not able to watch these programmes. Though the educational television programmes are meant for direct formal instruction in schools, these programmes are missed by the children who do not have facility to watch them at school. So educators and programme planner should think about this aspect, and must change the timings of regional educational programmes, so that children can watch these programmes at home or make arrangements in the school for children to watch the programmes.

In the present study, it is found that the peak viewing time for children is 7 to 7.30 p.m. on week days and several hours on Sunday including the regional feature film. 'Chitrahaar', 'Chitralahari' (regional film songs) too are all-family favourities. Sevanti Ninan (1991) mentioned that peak viewing time for children is the same as it is for adults 9 to 9.30 p.m. on week days. The reason for difference in peak viewing time of children in the present study may he due to regional variation. During 7 to 7.30 p,m. regional sponsored serials are being televised. which are favourite programmes for this elementary school age. This pattern has been established time and again. In the mid-eightees, Doordarshan's audience reseasch wing did a study in Madras and Delhi of about 300 odd children which showed that they watched serials and films avidly (sevanti Ninan, 1991).

Programme preferences

Television programme preferences follow much the same pattern as do preferences for reading, movies, and radio (Lyness, 1951). Hurlock (1956) mentioned that pre-school children like simple stories about animals and familiar people, music, cartoons and simple comedy. First and second grade children like puppet shows, harmless (soft) mysteries, humour, family life situations, and prize presenting programmes. By the third and fourth grades, interest in imaginative programmes increases, such as those about rockets and spaceships, and in variety shows, mystery and detective stories, dramatic plays and music. Fifth and sixth grade children like much the same type of programme as do those in the grade below, but they also like presentations dealing with science and feats of skill. However, at every age, there is a wide range of interests reflected in a wide range of preferences. Stories, comedy, cartoons and music are always popular at every age (Hurlock, 1951).

When children first start to watch television, they will watch any programme available. After, six months of television watching, however, they learn to be more discriminating in their choice of programmes. They develop well balanced programme preferences and want variety in their programmes as well as well written programmes (Crow and Crow, 1962).

From the study, it is clear that both boys and girls mentioned children's programmes as their favourite programme Schramm and his co-workers (1961) also found that, typically, the first programmes that most children identified as their favourites were programmes which the broadcasters referred to as "children's programmes". The central characters of such programmes were usually animals, animated characters, or puppets, although some times the children themselves took the role of the sympathetic charactor.

Next to children's programmes, boys preferred comedy serials, films and film songs. Ribeiro de Almeida and others (1982) also found that comedies, adventure stories, violent movies and soap operas were the preferred programmes for children. Next to children's programmes, girls liked feature films and film songs. Crow and Crow (1962) also mentioned that girls seem to prefer programmes that feature their favourite motion picture stars or that deal with domestic drama.

There seems to be no association between socio-economic status, and favourite programmes mentioned by the children. Children belonging to all type of socio-economic groups mentioned "children's programmes" as their favourite programmes.

These results are consistent with De Lanyu et al., (1986) who found that children aged 9-10 years tended to prefer children's programmes. Children younger than 10 years generally disliked adult programmes.

Kunhi Krishnan (1991) felt that a distinct difference between some of the world's famous children's programmes and those in India is that the Indian programmes, lacks any clear cut educational objective, compounded further by linguistic and cultural differences. It is also worthwhile to state that while television transmitter expansion in terms of hard were has been phenomenal very little effort has been made for proper utilization of television for children. It is also imperative to show special concern in assigning proper television time and specialised production for children with in the sxisting facilities, and resources of the country. Though it might be hard, one wi l, have to take recourse to this as there is no alternative.

One of the prime concerns for expansion of television in the country has been for education and social development. Television exerts considerable influence on the lives of children, and inculcates positive attitudes, values and behaviour though only less than five percent of the total programmes are aimed at them. Gill (1984) mentioned that the time slotted for children's programmes is generally at the begining of the evenings transmission (when most children want to play out doors). Again the total transmission time in most metropolitan cities is 5-5 hours/day or approximately 30-35 hours/week. The time allocated to children's programmes is 1-3 hours/week. It may be pertinent to mention a few related statistics mentioned by Gill at this point.

—40 per cent of our country's population consists of children below 16 years ; approximately 4 per cent of our television programmes are aimed at them.

—13 per eent of telecasting time is devoted to news bulletins, almost 15 minutes every day are slotted for for visits of VIPs.

So there is a need for programme planners, and educators to look into this aspect. Children will become well informed if a feature like children special news bulletin will be introduced.

Study also shows the feeling of the child if he/she misses favourite television programme. Girls seem to feel more if they miss their favourite programmes than boys. Children belonging to lower and middle socio-economic groups seem to feel more, if their favourite programme was missed. Schramm, Lyle and Parker (1961) also reported that some children appeared to be quite compulsive about television. Such children were vaguely ill-at-ease w en they missed a favourite programme, or when their set was broken or when some programme or performer they particularly liked was off the air. Some children felt uneasy when they were away from television on a summer vacation. When asked to explain this feeling, one girl responded, "it's just as if they were your friends or your family-you miss them when you don't see them". Some children explained that they felt they were missing something, that they were out of stey and were not in touch with what their peers were doing. Schramm and his co-workers (1961) felt that, then that watching television was functional for these children beyond the specific benefits of learning and entertainment. Kunhi Krishnan (1990), felt that once addicted to this medium, children become listless. This leads to passivity and poor concentration in other spheres. Therefore, parents, educators and industry representatives must take into consideration the possible consequences of unrestrained television viewing on early school aged children.

Effects of television and children's time spent on various activities

Television's effects are the result of an interactive process between the characteristics of television and the characteristics of its users. Different children could watch the same television content and the effects could be different.

Table 27 shows that more than 40 per cent of both boys and girls felt that their play and reading are affected as a result of television, 65 per cent of boys and girls felt that their home work is not affected. Sevanti Ninan (1991) mentioned that 57 to 77 per cent of the children rescheduled their eating, sleeping, study and play according to television programme. The maximum rescheduling was in the case of play ; 77 per cent of the children interviewed, said they organised their play according to television programmes (The Hindu, August 4, 1991). In the present study also, more than 50 per cent of both boys and girls mentioned that their play is not affected as a result of television ; probably they might be rescheduled their play time. But the remaining children whose play is affected as a result of television watching should learn to reschedule their play time, because play is believed to have important functions for the growing child. Parents also should guide their children regarding this aspect.

Majority of the children felt that television did not affect their home work. These results are consistent with the findings of Maccoby (1951). She found that when children who have television in their homes are compared with children who do not, there is little difference between them in the excent to which they are interested in their classroom work ; the two groups of children do equally well in completing assignments of school work to be done at home and they perform equally on tests. Sevanti Ninan (1991) mentioned that as for school work, mothers were firm enough to ensure that in 50 per cent of the homes, school work was never done with the television on. Seventy three per cent of the mothers said they insisted their children finish their school work before switching on television, 34 per cent of the children said that they sometimes did their school work while watching television and another seven per cent seem to do most of their home work in front of the television set.

On the whole, most children seem to be picking up their home work by waking early in the morning or going to bed late in the night, but reading seem to be affected as a result of television. Zuckerman and others (1980) also found that light to moderate television viewing influences reading habits. Crow and Crow (1962) also mentioned that much concern is experienced by many adults with the effect of excessive involvement with television on children's reading habits. The question is whether the formation of good reading habits is being retarded or inhibited by time spent watching television. Crow and Crow (1962) felt that about 25 per cent of young people devote time to motion picture attendance and television programmes that otherwise could be given to reading or other forms of relaxing activity. So teachers and parents must look into this problem, Earlier procedures in "reading lessons" which consisted of having each child in turn stand and read aloud a passage from a reader which the other pupils were supposed to follow silently, have disappeared in most schools. Teachers must look into this problem. So parents and school teachers should encourage oral reading by restricting television viewing, to some extent.

Table 30 shows that very few boys and girls are practicing the things learnt from television. When compared to girls, boys seem to be practicing things more learnt from television. In interview with parents, it is clear that most things children (mostly boys) learnt from television given by parents are fightings, that are exhibited in serials and feature films. Very few children are practicing about health and hygiene. These results are consistent with the NIPCCD study reported by Sevanti Ninan (1991) who mentioned that, asked what they had learned from television, 89 per cent of the younger children could not specify what they had learnt. But the older children could. A good 72 per cent said they had learned something from television, mostly values such as obedience (26 per cent), followed by information related to hand work and cooking (9 per cent) health and hygiene (7 per cent) and so on. Whether a child imitates of practices what he has seen will depend on many things, It should depend on whether the behaviour he sees is codsistent with the moral standards of behaviour he has been taught and whether the moral teaching has been effective enough to enable him to overcome an additional bit of temptation.

When the feeling of the child after viewing a programme on television is considered as in Table 31 it is clear that eighty per cent of boys and girls are feeling enjoyed. Few children (10.3 per cent) belonged to low socio-economic group are feeling distress and lack of interest after viewing a television proframme. Rubinstein (1981) mentioned that the context in which the viewing takes place, the pre-disposition of the viewers and even the sex and social class, can modify the effect of television viewing. As Schramm, Lyle and Parker (1961) mentioned, parents who provided their children with warm, secure relationships, and an interesting home life had little to fear from television.

Television Viewing Behaviour – Parents Verses Children

The second objective with which the present study initiated was to compare children's view points with their parents view points with regard to television viewing behaviour. Accumulating research on parent behaviour and child development suggests that parents have great influence upon the behaviour of their children. Parents could have a great influence on the ways in which their children watch television not only by controlling what is seen but by influencing the ways in which children watch (Culling ford, 1984). Generally parents share with their children the style of watching television. Children can take on the views of their parents without being aware of it.

After looking at the television viewing behaviour reported by parents and children, a discussion about the areas of agreement and areas of conflict or disagreement between parents' and childrens' view points with regard to television viewing will be useful, for developing more understanding between parents and children. It will also help to remove conflicts between parents and children by parent education and group councelling.

Areas of Agreement

Time spent on watching television

Both children and parents mentioned that maximum amount of television viewing was during week ends.

Effect of television on children's time spent on various actiuities

Reading

Both parents and children are concerned about the effect of television on children's reading habits. Several studies also found that television viewing influences reading habits (Zuckerman, 1980). Child development research now suggests that academic education in the school will not solve the problems of low academic achievement of disadvantaged groups, and suggests the need to support the child's education in the family and community. An analysis of major characteristics of children's interaction with parents also supports the view that parents are teachers and increases the credibility of findings concerning parental influence on child development. So parents should recognise the importance of their children's reading. Liebert (1977) in a study of children from very low socio-economic groups showed significant relationship between parent behaviour and attitudes and the children's reading achievement. Therefore, parents should restrict their children's television viewing to some extent and should try to improve their children's reading habits, especially during this elementary school age.

Home Work

Most parents belong to lower socio-economic group felt that television watching has affected their children's home work. 62.1 percent of children belong to low socio-economic status also felt that their home work was affected as a result of television watching. Here also there is agreement between parents' views and children's views. Table 28 shows that most of the children are able to pick up their school work by going to bed late in the night or by waking early in the morning. Nearly one fourth of the children are leaving the work without making an attempt to make it up. Here also parents play an important role and should see that school work is finished before the television is on. Sevanti Ninan (1991) mentioned that as for school work, mothers were firm enough to ensure that in 50 percent of homes, school work was never done with the television on, 73 percent of mothers in the study quoted by Sevanti Ninan (1991) said, they insisted their children finish their school work before switching on television.

Attitudes of parents and children

Table 19 shows the average attitudes scores of parents pertaining to their child's television and Table 32 shows the average attitude scores of children towards television viewing. From Table 19, it is clear that boys' parents seem to have more positive attitude towards television viewing than parents of girls. Similar trend is seen regarding children's attitudes also. Boys showed more positive attitude towards television viewing than girls. Singer and others (1980) also found that parents were very influential models for the amount of viewing and attitudes towards television that children displayed.

Areas of Disagreement

Time spent on watching television

Table 9 shows that mean time spent (minutes) per day watching television mentioned by children is more than the time mentioned by the parents about their children's television viewing. This shows that children are watching television for more time than what the parents expect about their watching. From the table, it is also clear that during holidays parents mentioned that their children viewing is same as on regular days. But children mentioned half-an-hour more viewing during holidays than on regular days. Programme planners must look into this aspect and should try to telecast child related programmes or effective educational programme during holidays.

Effect of television viewing on children's time spent on varions activities.

Play

Table 17 shows that more than 50 percent of boys' parents and 50 percent of girls' parents felt that television has affected their children's time spent in play. But Table 27 shows that as per children's reporting more than 50 percent of both boys and girls felt that their play is not affected as a result of television viewing. Probably children might rescheduled their play time, without being aware by their parents. Though most parents and educators felt that television viewing affects children's time spent in play, the results of the present study shows that majority of the children are rescheduling their play time according to their favourite television programmes. Sevanti Ninan (1991) also mentioned that the maximum rescheduling of children according to television programmes was in the case of play.

Attitudes of parents and children

In the present study parents of upper socio-economic group tend to have more positive attitude towards their children's television viewing. As far as the attitudes of children belong to different socio-economic groups are considered, they are just opposite to their parental attitudes. Children from lower socio-economic group seem to have more positive attitude than middle and upper socio-economic groups. In such circumstances, there is possibility to conflict arousal. If children have positive attitude and their parents have negative attitude or vice versa, usually conflict arises. Children will feel it guilty and parents may feel it as threat against them. Hurlock (1980) mentioned that children's work in school and their attitudes toward school are greatly influenced by their relationships with family members. Wholesome, happy family relationships lead to motivation to achieve, while unwholesome, unhappy relationships cause emotional tension which usually has a detrimental effect on child's abilities to concentrate and to learn. So further research regarding the attitudes of parents and children belong to different socio-economic groups towards television viewing is necessary. Such research will help to identify wrong assumptions and misunderstanding between parents and children. Further group councelling, parent education and guidance of child will help to overcome the conflicts between parents and children.

Table 20 shows that 59.4 percent of parents felt that "television makes children more lazy and less interested in studies". At the same time 43.7 percent of parents felt that "television makes people broad minded". These results are consistent with Hanumantha Rao (1984), study. In his study at Hyderabad, Hanumantha Rao found that there is wide spread concern among parents (74 percent) about the undesirable influence of television on children's study habits. At the same time 68 percent of parents agree either fully or partly, that television has contributed to increased general knowledge of their children. Thus parents feel that television exerts diverse and dichotomous influence on children. It disturbs children's studies but it widens their horizons and contribute to increased general knowledge.

Table 33 shows that nearly 70 percent of boys and girls in the present study felt that television watching improved their knowledge. Suryakanthi and Meenakshi (1989) in their study found that majority of parents have positive attitude towards television viewing.

Thus, it is clear that areas of agreement of both parents and children are :

1. the mean time spent on watching television on week ends,
2. effect of television on reading and home work, and similar attitudes of parents and children when sex wise distribution was considered.

Areas of disagreement between parents and children are regarding the time spent per day watching television and also during holidays, effect of television on play and divergent attitudes between parents and children, when socio-economic status was considered.

The third objective of the present study was to explore the potential influence of television viewing upon educational development in children.

Table 10 shows that most of the children having high educational achievement status (98.4 percent) are light viewers. Most of the children having poor educational achievement status are moderate viewers. The corresponding X^2 statistic was found to be significant at 0.10 probability level. Thus it is clear that as the viewing time increases, the educational achievement status seem to be decreasing. These results are consistent with Rubinstein (1983), who found that heavy television watching relates inversely to educational achievement status.

When type of programmes watched by children as in Table 11 is considered, it is clear that, children having poor educational achievement status are watching entertainment programmes for more time. Children who are having high educational achievement status are watching educational programmes, news and sports for more time and entertainment programmes for less time, than children with moderate and poor educational achievement status. Along with age, sex and social class, mental ability was also found to be an important factor in selection of programmes to be watched on television. Schramm, Lyle and Parker (1961) found that brighter children tried different things earlier. They began watching television earlier and more frequently ; then they took "the hard steps" to serious programmes, educational shows and documentaries. Schramm and his co-workers (1961) reported that the high IQ scores were also ones who are chiefly able to identify faces that had appeared on television for public affairs reasons rather than for entertainment reasons, These patterns of viewing news programmes public affairs commentary, and so on began earlier with the brighter children, They were the first of their age group to turn away from the western and situation comedy shows. Maccoby (1967) opined that the level of intelligence has a great deal to do, not only with how much a child watches but which programmes the child chooses. The child's choice, are also influenced by the education and taste of parents. Schramm and his co-workers (1961) felt that children of well educated parents tended to watch television less than other children following the examples set by their parents. Bouchalov et al., (1981) in their study observed that the family's social background affected the children's school achievement. They found that the greatest influence on children's scholastic success was exerted by parental educational level and the least by housing conditions. Thus the amount of time devoted by children for televiewing, and type of programmes watched are affected by the cultural values and adherence to rules and regulations found in the home. Results of the present study shows the educational achievement status of children and control over choice of programme to be watched. As the educational achievement status increases, decision of programmes to be watched by the parents seem to be increasing. Shearon (1983) found that television restriction enhanced performance IQ and reading time of children. Gaddy (1986) study also replicated the consistent finding of past studies a uniform and highly significant negative correlation between television and achievement. So, from the above discussion it is clear that excessive television viwing seem to have a negative effect on the educational achievement status of children. Parents should restrict their children's television viewing. Not only children's television viewing, but parents should modify family television viewing habits, since children follow the examples set by their parents.

Table 15 shows that there is no association between television viewing patterns and educational achievement status. Table 24 shows that there is no association between educational achievement status and children's favourite television programmes.

The last objective of the present study was to find out the relationship exists between internal and external motivational controls (locus of control), television viewing behaviour and educational achievement status of children.

The locus of control (LOG) orientation of children, their attribution of casuality is consistently found to be related to academic achievement (e.g., Crandall, Katokovaky and Crandall 1965) children who believe that they themselves have control over their environment (internals) achieve higher level of academic success than children who believe that their lives are controlled by external or chance force, The specific processes accounting for the relationship between locus of control and academic achievement have not, however been clearly delineated. In the present study, Table 2 shows the associtiou between educational achievement status and locus of control. Significant association is seen between educational achievement status and locus of control. Studies of locus of control have reliably shown that internals attain higher levels of academic success than externals. In the present study also, it was found that children falling in high educational achievement status are having high internal locus of control. Kanoy et al., (1981) also found that achievers had significantly higher internal control scores than under achievers for the IAR total score and IAR positive score.

When the relationship between locus of control and television viewing behaviour is considered, table 9 shows that the mean viewing time of television per week is more for children who are identified as having external locus of control than the children who are identified as having internal locus of control. Ridley and others (1985) also found that subjects who expressed less interpersonal trust and less sense of self-efficacy in relation to home work tended to spend more time watching television.

From tables 13 and 14 it is clear that children with external locus of control are viewing television fo more time than children with internal locus of control, on regular days, week ends as well as on holidays. Children with high internal locus of control seem to spend more time watching television on regular days and less time on week ends and holidays than the other two groups of children. Schramm and his associates (1961) in their study found that for brighter children television no longer presented a challenge. Most of them were finding greater rewards in the print media and in social and school activities. The same can be possible is the present study also. Table 7 shows that, among the children whose families are having print media, majority (63 percent) are having high internal locus of control. Print media viz., news papers and magazines are available in very few percent of children having external locus of control. Probably children with high internal control might be engaging in other activities like regarding or social participation like play during week ends and holidays. Another thing interesting is to be noted that, on Wednesday, Friday, Saturday and Sunday during which film based songs, and feature films are televised. viewing time is less for children with high internal locus of control than the other two groups. It is established that child viewing of Doordarshan's serials and film based programmes is cent percent (Sevanti Ninan, 1991). Sevanti Ninan quoted the fact that, 41 percent of children in a study came from one room homes, the high rate of viewing of the feature film and film songs could have more to do with family viewing habits. When every one else is watching, children watch, willy, nilly mesmerised by the melodrama.

Singer et al. (1980) found that there was consistent relationship between parent and children viewing. So comparatively low amount of watching of television by children with high locus of control may be a characteristic of features of family itself.

Table 11 shows that children who are having internal locus of control are watching for more time educational programmes, news and sports. Children with external locus of control are watching more entertainment programmes. Maccoby (1967) opined that the level of intelligence has a great deal to do, not only with how much a child watches, but which programmes he chooses. The child's choices are also influenced by the education and taste of parents. Further more among a group of children who have chosen to watch a given programme, some are undoubtedly more succeptible than others to its influence—children differ in what element of a programme capture their closest attention and what details they remember.

Study shows that majority of children with external locus of control are watching television programmes randomly. Most of the children with high internal locus of control are watching only selected programmes. Schramm and his co-workers (1961) opined that brighter children used television less often and more selectively and turned to print media for much of their serious informational needs. The lower 10 groups, on the other hand tended to use television more and print media less. From the present research also, it is clear that children with internal locus of control are more selective in their use of television than children with external locus of control.

Locus of control and control over the choice of programme for watching are strongly associated. Most of the children with external locus of control are deciding television programmes to be watched by themselves. Among children with high internal locus of control, 45.7 percent are watching the programmes decided by their parents and 37 percent are deciding the programmes for themselves. Streicher and Bonney (1974) in their interview with elementary school children found that parental control of the viewing pattern of children was rather infrequent. Hurlock (1956) mentioned that though 61 percent of children reported that they had no help from their parents in selecting programmes, 82 percent of the group reported that they watched television with their parents.

It is also clear from the study that most of the children with external locus of control mentioned children's programmes as their favourite programmes. Majority of the children with internal locus of control mentioned story serials as their favourite programmes. Sevanti Ninan (1991) mentioned that viewing of programmes meant for children is only between 5 to 10 percent. Mostly children get bypassing Doordarshan's children's fare altogether. Sevanti Ninan (1991) felt that what is emerging, not unreasonably is that children like spectacle, noise and action. Doordarshan's own programmes are sadly lacking in all three. Gill (1984) felt that children's programmes are among the most substandard of all programmes produced. Gill suggested that producers must be carefully selected for children programmes. The emphasis must be on selecting personnel who have :

(a) A good, working knowledge of child development/education.

(b) Training/experience in and aptitude for designing programmes for children.

In making selections, it may be useful to seek the help of institutions, voluntary agencies associated with the fields mentioned above. Telecasting time allocated to children's programmes and child related programmes must definitely be increased to at least 20 percent of total transmission time. Schramm, Lylo and Parker (1961) mentioned that sex, age, mental ability were found to be related to programme preferences. From the present study, it is clear that child's locus of control also found to be related to programme preferences of children. Since many authors felt that children's programmes are among substandard programme, children with high internal locus of control might be turned to story serials, intended primarily for adults.

Thus from the above discussion, it is clear that there is a positive relationship between locus of control, educational achievement status, negative relationship between educational achievement status and children's television viewing behaviour. As the viewing time increases, the educational achievement status seem to be decreasing. Children falling in high educational achievement status are having high internal locus of control. Children who are having high educational achievement status and children with internal locus of control are watching educational programmes, news and sports for more time, than other groups. Majority of children having high educational achievement status and most of the children having high internal locus of control are watching television programmes decided by their parents. There seems no association between educational achievement status and children's favourite television programmes but locus of control and children's favourite television programmes seem to be associated to some extent.

Thus a detailed discussion about television viewing behaviour explained that children spent most of their out of school time watching television, there are also several different patterns in their use of television. There are considerable differences among the children in their use of television and these differences were not only the result of child's sex and social class background but also varied in accordance with their locus of control and educational achievement status.

Thus television seems to be part of the total environment that we, as a society of adult provide for children. Although television is a fairly new element in this environment, it is already providing a share of the influences which shape children's thoughts and actions. Therefore, educators, programme planners and investigators must be concerned about television, take responsibility for it and apply standards of evaluation to it, in the same way they do for other important aspects of the environment that affect children such as school or conditions that affect children's health and safety.

Major Findings

The following are some of the major findings of the study :

1. Significant sex difference is not seen regarding the mean viewing time of children per week. Comparatively, girls are watching television for more time than boys.
2. Mean viewing time (hours) per week for children belonging to lower socio-economic status is more than

children belong to middle and upper socio-economic groups.

3. Irrespective of sex and socio-economic status, all children are watching television for more time on weekends than on regular days.

4. Children are spending maximum amount of time on watching entertainment programmes. On the whole, when compared to telecast time of educational programmes, children are watching educational programmes for less time. One of the reasons for spending less time on educational programmes by the children is that, both the regional and network educational programmes telecast during the school hours. Though the educational television programmes are meant for direct formal instruction in schools, these programmes are missed by the children who do not have facility to watch them at school. So educators and programme planners should think about this aspect, and must change the timings of regional educational programmes, so that children of this age (elementary school age) can watch these programmes at home or make arrangements in the school for children to watch the programmes.

5. Children watch a lot of different programmes, but there is some doubt about how much they absorb. So there is a need for research to identify what the children absorb from various programmes they watch.

6. Most of the children in the present study (5+ to 10+ years) are not watching programmes after 9 p.m. So programme planners must look into these aspects, and should plan programmes accordingly keeping in view target audience and peak viewing time. In the present study, it is found that the peak viewing time for children (5+ to 10+years) is 7 p.m. to 7.30 p.m. on week days and several hours on Sundays including the regional feature film.

7. From the present study, it is clear that weekened viewing is more for all children. One more thing clear from the present study is that children are watching educational programmes during holidays. So programme planners should plan effectively educational programmes during holidays.
8. There is association between socio-economic status and physical position of the subjects while viewing. There is a need to make parents aware of the correct physical position of their children while watching television.
9. Children belonging to upper socio-economic group are watching television at appropriate distance (not closer than 5-6 feet from the television set). Children belong to lower socio-economic status are watching television from a very close distance, which is not good for better vision. It is felt that there is a need to identify, watching in which type of television (colour or black and white) of what width (big 51 cms. or portable 36 cms) is good for better vision.
10. Boys seem to have an independent say in deciding the programmes to watch than girls.
11. Explanation of the parents and commenting of the parents about the television programmes while watching, increases children's learning and recall of information from television programmes.
12. More than 50 percent of parents of boys and 50 percent of parents of girls felt that television has effected the child's time spent in play. When compared to middle and upper socio-economic groups, more number of parents belonging to lower socio-economic group felt that television has affected their children's time spent in play, household activities, reading and doing home work. Bed time seems to be not much affected as a result of television viewing.

13. A simple solution to remove negative effects of television is that parents need to learn to use the off switch. Parents must control, the amount and kinds of content their children view. So there is implication for educational psychologists, who may want to play some role in influencing parents to monitor what their children watch or control frequency of viewing. Parents must be educated regarding the effective use of television for their children.

14. Both boys and girls mentioned that children's programmes are their favourite programmes. Next to children's programmes, boys preferred comedy serials and girls preferred films and film songs.

15. Girls seem to feel more if they miss their favourite programmes than boys.

16. When television viewing behaviour between parents and children was considered, the following areas of agreement and disagreement were identified.

    Areas of agreement between parents and children are, 1. the mean time spent on watching television on week ends, 2. effect of television on reading and home work, 3. boys' parents as well as boys expressed more positive attitude towards television viewing than girls' parents and girls.

    Areas of disagreement between parents and children are, 1. the time spent on watching television on regular days and holidays, 2. the effect of television on play, 3. when socio-economic status was considered, children and parents' views were found to be divergent.

17. Heavy television watching relates inversely to educational achievement status.

18. As the educational achievement status increases, decision by the parents about what programmes to be watched by children seem to be increasing.

19. Excessive television viewing seem to have a definite negative affect on the educational achievement status of children. Parents should restrict their children's television viewing. Not only children's television viewing, but parents should modify family television viewing habits, since children follow the examples set by their parents.

20. The mean viewing time of television per week is more for children who were identified as having external locus of control than the children who were identified as having internal locus of control.

21. Children who are having internal locus of control are watching for more time educational programmes, news and sports. Children with external locus of control are watching entertainment programmes for more time.

22. Children with internal locus of control are more selective in their use of television than children with external locus of control.

23. Most of the children with external locus of control mentioned children's programmes as their favourite programme. Majority of the children with internal locus of control mentioned story serials as their favourite programmes.

24. There is a positive relationship between locus of control, educational achievement status and negative relationship between children's television viewing behaviour and educational achievement status. As the viewing time increases, the educational achievement status seem to be decreasing. Children falling in high educational achievement status are having high internal locus of control (IAR score 22 and above).

Limitations of the Study

1. The study sample had been restricted to 180 children

and 180 parents due to limitation of time. A broader sampling frame would have given data for making more realistic conclusions and for proper generalization.

2. In order to assess educational achievement status of children, an apriori five point scale was developed. The reliability and validity of scale was not studied due to time limitation. Parents estimation independent to school records would have been more useful.

3. Obtained a reliable and valid measure of amount of viewing in a interview is difficult. Some problems with this measure include the reliability of children/parents' judgement, possibility of social response biases and the fact that it does not supply an exact numerical estimate of amount of viewing.

4. The total number of hours telecast per week of advertisement programmes, mentioned in the present study was based on the investigator's observation of advertisements telecast time, over a week period. So the numerical estimate of telecast time of advertisements may not be accurate. And the total number of telecast time (hours) of other programmes viz., educational, entertainment, sports etc., are based on analysis of one week's (03-03-1991 to 09-03-1991) television programmes. The total telecast time over a period for various programmes may be changing.

5. Attempts were made as far as possible to consult the original articles. However, in some cases where original articles were inaccessible, the abstracts became the major source.

Suggestions for Further Research

1. A similar study can be carried out in urban slums and rural areas and the results can be compared.
2. A study of the teacher's attitudes towards children's television viewing needs to be done.

7

Summary

Any steady diet of television, regardless of its content can exert a powerful influence on children.

Liebert et al., (*1977*).

An attempt was made in this research investigation to establish the interrelationships among television viewing behaviour, personal and educational development in children. Also included in the scope of the investigation was a study of parent's and children's attitudes towards children's television viewing behaviour and explore the extent to which parents' views and children's views are similar (or dissimilar). An attempt was also made to relate television viewing behaviour of children to various aspects such as sex, social class and internal or external motivational controls (locus of control).

180 children (96 boys and 84 girls), in the age range of 5+ to 10+ years, selected from two different schools (1. Shri Venkateswara University Campus School and 2. Shri Kodanda Ramaswami English Medium School) in Tirupat town, and their parents (mothers), constituted the sample for the study.

On the basis of the review of earlier literature and also basing on the general observation of children's television viewing behaviour, the following objectives were formulated.

1. To develop tools for assessing television viewing behaviour and attitudes towards television viewing by children and their parents.
2. To understand the influences of sex and socio-economic status on television viewing behaviour of children.
3. To compare children's view points with their parents' view points with regard to television viewing.
4. The explore the potential influences of television viewing upon educational development in children.
5. To find out the relationship between internal or external motivational controls (locus of control, television viewing behaviour and educational achievement status of children.

In order to assess children's television viewing behaviour, wo omnibus schedules—one for parents and the other for hildren were developed.

Omnibus schedule for parents consisted of three sections. The first section *i.e.*, general information includes the socio-demographic particulars, educational particulars of the child and media availability in the family. The second section includes the television viewing behaviour patterns, which measures various important behavioural aspects as follows-1. Types of programme watched, 2. number of hours spent for watching television, 3. distribution of viewing on regular days and week ends, 4. Physical position while watching, 5. distances of watching, 6. other behaviour along with television watching, 7. mode of watching, 8. control over choice of programmes for watching and 9. the effect of of television on the child's time spent in various activities *viz.*, play, household activities, reading, home work and bed time. The third section consists of parent's attitudes towards their children's television viewing.

Omnibus schedule for children consists of two sections. The first section includes the television viewing behaviour pattern of the child. It consists of 1. place of watching television by the child, 2. number of hours spent for watching, 3. children's favourite television programmes, 4. the emotional impact of either watching a programme or missing a favourite programme and 5. the effect of television on children's time spent in various activities viz., play, home work, reading and household activities. The second section of the schedule consists of attitudes of children towards television viewing.

The reliability and validity of the parent's and children's attitudes scales were also established. The split-half reliability for parent's attitude scale was 0.93 and for children's attitude scale was 0.83, after correction with the Spearman-Brown Prophesy Formula. The validity index of all items in parent's attitude scale was above 0.50 and for children's attitude scale was above 0.3, and were found to be satisfactory.

The internal or external motivational control (locus of control) was measured, using Intellectual Achievement Responsibility (IAR) scale-devised by Crandall, Katkovsky and Crangdall (1965). The scale was translated into Telugu-the regional language, to facilitate the respondents to answer the items in their mother tonge.

Socio-economic status was measured by using Kuppuswamy's socio-economic status scale (urban), after modification of the income aspect of scale.

Data was tabulated to highlight the differences between different groups *i.e.*, boys and girls, upper, middle and lower groups and between children with different locus of control. X^2-test of significance was applied to see association between sex, socio-economic status, locus of control, educational achievement status and children's television viewing behaviour.

The following are some of the salient findings.

1. Heavy television watching relates inversely to educational achievement status.

2. 62 percent of boys' parents and 50 percent of girls' parents felt that television has affected their children's time spent in play. When compared to middle and upper socio-economic groups, more number of parents belonging to lower socio-economic group felt that television has affected their children's time spent in play (72.4 percent), household activities (27.5 per cent), reading (55.2 per cent), and doing home work (72.4 per cent). Bed time seems to be not much affected as a result of television viewing.
3. Children who are identified as having internal locus of control are watching for more time educational programmes, news and sports. Children with external locus of control are spending most of their viewing time watching entertainment programmes, (9.62 hours per week).
4. When sex of the child was considered, it was found that parents and children have similar attitudes *i.e.*. parents of boys as well as boys expressed more positive attitude towards television viewing than girls and their parents.

   When socio-economic status was considered, children's and parent's views were found to be divergent. Comparatively, parents belonging to upper socio-economic group seem to have more positive attitude towards their children's television viewing. On the other hand, when compared to other groups, children belonging to lower socio-economic group seem to have more positive attitude towards television viewing.
5. There is a relationship between locus of control, educational achievement status and children's television viewing behaviour. As the viewing time increases, the educational achievement status seem to be decreasing, children falling in high educational achievement status are having high internal locus of control.

Thus the results have clearly established a relationship between children's television viewing behaviour, educational achievement status and internal or external motivation controls (locus of control), of children. The study explored the quantum of television watching by children, type of programmes watched and effect of television on personal development of children such as figures bearing upon home work reading habits and bed time hours, a report on the programme choices of children and an exploration of potential physical, emotional and educational development, which might result from viewing television. Thus there were considerable differences among the children in their use of television and these differences were not simply the results of sex but also varied in accordance with the child's locus of control, social class background and also the children's adjustment to family, friends and scholastic performance.

The findings reported may be treated as important in understanding children's television viewing behaviour, for parents, programme planners and educators, specially in Indian setting. Also the study may be considered very useful for providing a basis for effective parent education and guidance of children.

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